

GRAIN & FEED JOURNALS

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A Merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter

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In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

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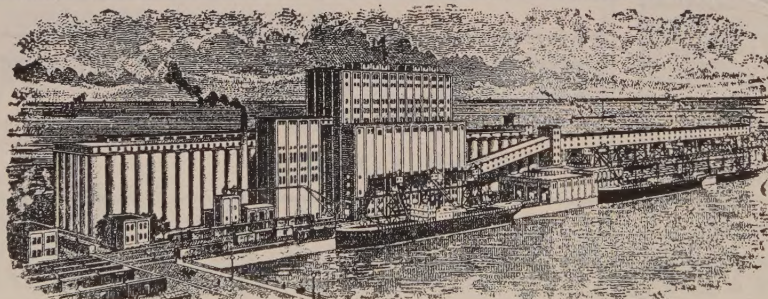
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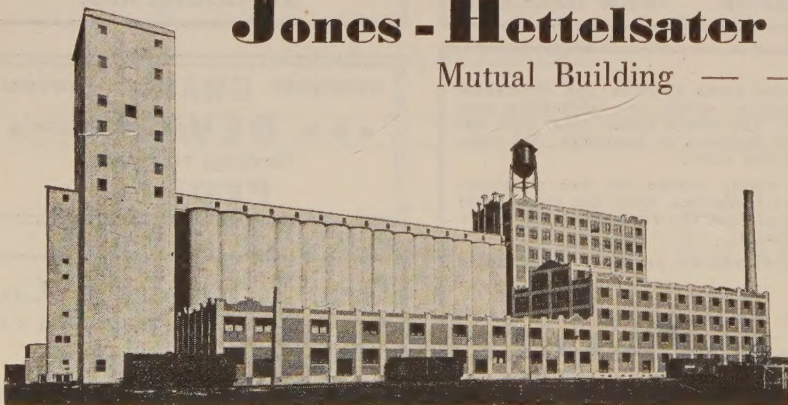
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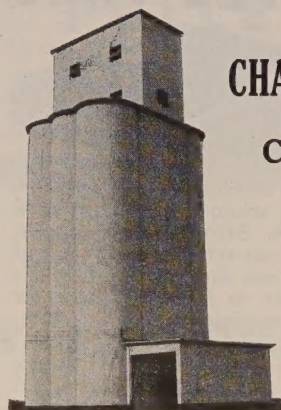
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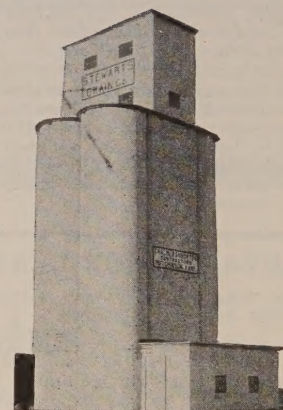
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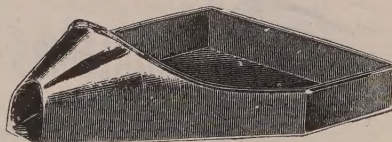
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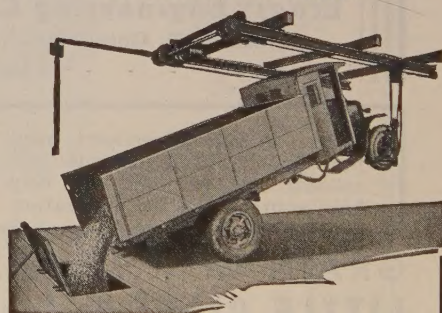
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HAMMER MILL with 25-h.p. motor and all attachments. Priced to sell. Write 82A10, Grain & Feed Journals, Chicago, Ill.

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FEED MIXER for sale, has motor, and a late machine. Need space. Will sacrifice. Write 82A8, Grain & Feed Journals, Chicago, Ill.

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FOR SALE—Two used cracked corn polishers; both in excellent condition. One used only one season. Priced for quick sale. Address 82H3, Grain & Feed Journals, Chicago.

FOR SALE—1 25 h.p. totally enclosed fan cooled ball bearing Fairbanks Morse Electric Motor 60 cycle, 3 phase, 220 or 440 volts, 1200 r.p.m. and Allen Bradley Starter; 1 American (Midget) Marvel 20 bbl. Flour Mill; 1 Eureka Double Wheat Scourer No. 39; 1 Eureka Double Fan Cleaner No. 301; 1 Jonathon Mill, Universal Flour Desser; 1 Double Acting Sifter; 1 Alsop Process Bleacher; 1 one ton vertical feed mixer; one Flour Packer. Gurley Grain Co., Gurley, Nebr.

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ELEVATOR EQUIPMENT for sale; Owens No. 10 Fan Mill; No. 3 Rowell Hammer Mill; Hart Parr 36 h.p. Engine; 30 ft. 6 in. Well Casting; one man Elevator; Scaler and Dump. E. T. Martin, Simpson, Minn.

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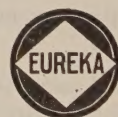
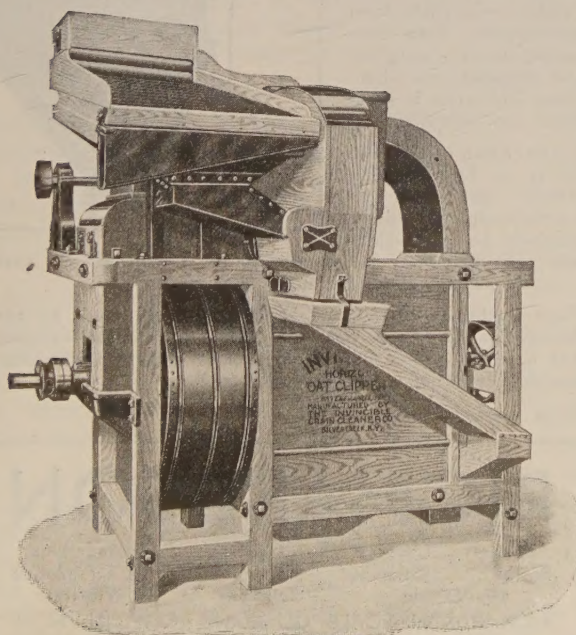
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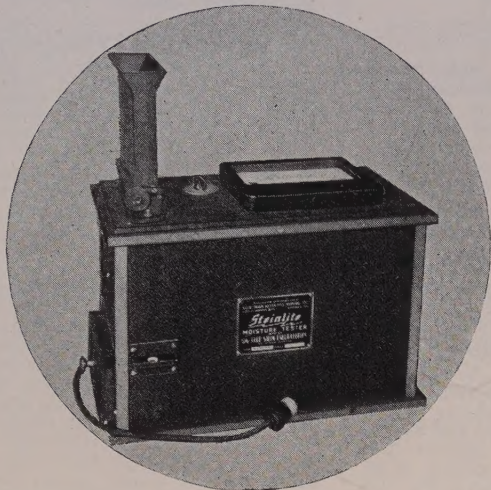
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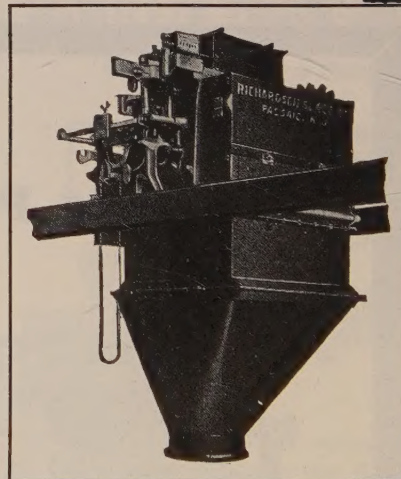
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GRAIN & FEED JOURNALS

CONSOLIDATED
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332 S. La Salle St., Chicago, Ill., U.S.A.
Charles S. Clark, Manager

A merger of
GRAIN DEALERS JOURNAL
Established 1898

**AMERICAN ELEVATOR &
GRAIN TRADE**
Established 1882

THE GRAIN WORLD
Established 1928

PRICE CURRENT - GRAIN REPORTER
Established 1844

Published on the second and fourth Wednesdays of each month in the interests of better business methods for progressive wholesale dealers in grain, feed and field seeds. It is the champion of improved mechanical equipment for facilitating and expediting the handling, grinding and improving of grain, feeds and seeds.

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To Foreign Countries, prepaid, one year, \$3.00.

THE ADVERTISING value of the Grain & Feed Journals Consolidated as a medium for reaching progressive grain, feed and field seed dealers and elevator operators is unquestioned.

Advertisements of meritorious grain elevator and feed grinding machinery and of responsible firms who seek to serve grain, feed and field seed dealers are solicited. We will not knowingly permit our pages to be used by irresponsible firms for advertising a fake or a swindle.

LETTERS on subjects of interest to those engaged in the grain, feed and field seed trades, news items, reports on crops, grain movements, new grain firms, new grain elevators, contemplated improvements, grain receipts, shipments, and cars leaking grain in transit, are always welcome. Let us hear from you.

QUERIES for grain trade information not found in the Journal are invited. The service is free.

CHICAGO, ILL., SEPTEMBER 27, 1939

WHILE there seems to have been a marked decline in the activities of the Angoumois Moth in corn, weevily wheat has earned heavy discounts for numerous shipments.

FULL storage rates are collectible on grain on which a farmer has obtained a C.C.C. loan that he pays off. The reduced charges apply only when the government takes over the grain in default and surrenders the receipts.

ELEVATOR OWNERS who make it their business to reduce friction either thru the application of modern lubricating devices or thru the installation of anti-friction bearings do not sacrifice their property to a fire caused by friction.

WHILE the neutrality act does not prevent shipments of grain to belligerents its repeal would place all dealings with warring nations on the substantial and well understood basis of international law, and to that extent facilitate international trade in grain, without taking sides.

SOYBEAN DUST IS EXPLOSIVE, as two men found out some time ago while cleaning out the dust collector when the spark needed was supplied by a defective light cord. When a known dust explosion hazard exists the lighting equipment should be unquestionably made safe.

LOW GRADE grain and dirt should not be spread about four inches deep on the floor of the car to fool the inspector. Good and bad should be mixed thoroly for even loading so the sampler can take a fair sample for inspection. Plugged cars are given the grade of the poorest contents when discovered.

IT IS not an accident that the California state ass'n of grain dealers has a large membership and works so efficiently in the interest of the trade. The numerous group meetings held in that state under the supervision of an able secretary are an important factor in the success of the state ass'n.

YIELDING to a farmer's importunity to raise the price bid only encourages the farmer to repeat the performance and fixes the suspicion most farmers have that the grain dealer never pays enough for grain. A reputation for fair dealing is established by bidding all the market will justify and then sticking to it.

THE CONDITION of new crop soybeans would seem to indicate that some fields have been harvested before beans were ripe and ready for safe marketing. The great increase in the crop will confront many country buyers with new problems in buying and marketing this record crop. Trial shipments will, no doubt, disclose erroneous grading.

TRUCKS require large and expensive scales, and the small weighing charge formerly made during the horse and buggy days is out of date. The trucking itinerant who is taking grain out of the grain dealer's own territory should be made to pay a handsome fee for weighing the load on the elevator scales. It is the dealer's only chance to get a small slice out of the business that belongs to him.

NO COUNTRY elevator operator has, as yet, been able to erect the AAA's steel bins for corn for the 3c a bushel allowed for land rental, foundation, erection and filling of bin. It just can't be done! While the CCC did not hesitate to lend an excessive amount on each bushel of farm sealed corn, the compensation tendered elevator men willing to erect the steel bins is below cost. Naturally, elevator men hesitate to accept the responsibility of erecting and supervising the care of the bins. They are just as much entitled to a fair compensation for their service in handling farm sealed corn as anyone serving the government in any capacity.

WELCHING on contracts may prove costly to the victims in the expected widely fluctuating markets. Now is the time, before prices have moved very far, to begin a careful selection of firms with whom to do business.

WHY HAGGLE with the country grain dealer over 2 cents more for storing government loan grain when the program is so beneficial to the grain grower that he could well afford to pay regular storage charges.

THE HOT DAYS of September this year were very much to the liking of weevil in the farm granaries, whose activities are always stimulated by high temperatures. If bisulfid was used while the heat was on well and good, but if fumigation is delayed until cold weather chloropicrin or cyanide must be employed to kill the insect pests and their eggs.

THE DISCRIMINATION that the railroads are attempting to enforce against river grain arriving at Chicago, by denying such barge grain the lower reshipping rate out of Chicago finds a precedent in the higher rate exacted by the railroad companies on grain by lake arriving at Buffalo for reshipment east. The purpose in each case is the same. The railroads want the additional rail haul.

TWENTY-FIVE years ago the federal government fixed the price of wheat at \$2.20 a bushel basis Chicago, while the ruling market price was in the neighborhood of \$3.95. So long as the U. S. A. keeps out of war there is little probability of the government's again attempting to fix the price of any grain, but in the light of former experience it would seem a part of wisdom for all grain buyers to exercise unusual caution in carrying a large volume of unhedged grain.

AFTER the price of wheat has advanced very far holders will have to take the risk that the United States government will fix the price radically downward, just as during the world war, when wheat reached \$3.45 in May, 1917, the President, Woodrow Wilson, under the then Food Act, moved the price down to \$2.20 for the basic grade at Chicago, in September causing heavy loss to shippers who had bought at a higher price and had the grain on hand.

FARMERS may be surprised that the head of the A.A.A. is persistently deprecating the advance in prices, when that is just what farmers supposed he has been working for at great expense to the taxpayers the past several years. Is it because a substantial price advance will convince the farmers they can get along without the politician's bag of tricks? Still worse, from the point of view of the bureaucrat, if prices advance he will get no credit, as the grain growers will ascribe it to the war.

Improving the Quality of Wheat

Chiefkan wheat has received a stunning blow from the Associated Millers of Kansas, who, after making careful baking tests, have denounced this variety, and appeal to all grain dealers to discourage the planting of any variety which does not possess desirable milling and baking qualities.

The Sunflower State has been blessed with so many active agencies working in the interest of producing better wheat that gratifying improvement should soon be attained in all parts of the state. The planting of test plots in many different sections of the state has stimulated the interest of growers in the selection of the best seed obtainable and the planting of pure varieties under the most favorable conditions.

Similar practices now in vogue in wheat growing areas has received such favorable consideration from farmers that marked improvement in the volume and the quality of the wheat crop of progressive farmers must soon result in more profitable returns for all discriminating growers.

The Country Elevator Man's Tax Problems

Disputes over the taxation of grain stored at transfer points has stimulated the interest of bailor and bailee in the tax collectors' efforts to levy heavier assessments. Then, too, the tax collectors of different states are increasing their efforts to collect more money from elevator operators.

In Ohio the tax collectors are changing their practices and levying a different tax on real estate than on buildings and machinery. They seem disposed to allow a different depreciation on both classes of property. It would seem that the only relief to be obtained by the elevator operators of any state would be to join hands in a common protest against confusing practices and demanding more reasonable assessments for all elevator property.

The elevator man fully recognizes that paved highways and the abandonment of railroads has destroyed all value in many elevators; hence, such property should not be assessed for taxation. Only by a careful study of all the factors entering into an appraisal of country elevators can reason and fairness abide. Assessing such property according to its age or its size ignores the factors controlling an elevator's real value. The condition of any elevator as well as the volume of its annual business is worthy of careful consideration. The multitudinous taxes invented during recent years bear so heavy on some firms as to destroy much of the value in their business plants.

By conducting a state-wide study of the problems confronting all the elevators, the state associations can help ele-

vator men to obtain more reasonable assessments.

Excessive Margins on Futures

Originally margins were required on trades in grain futures to protect the broker when a customer closed his trades at a loss; and this remains the prime purpose.

In recent years it seems that what has been and should be a purely customer-broker matter has been seized upon by those who would restrict trade as a means to drive speculators out of the market by requiring excessive margins.

Prevention of speculation is not a legitimate use of the powers of the grain exchange to set margins. There are those who believe a grain commission firm having large capital of its own should be free to extend credit to customers known to be responsible.

If any doubt remains as to the effect of excessive margins and narrow daily trading limits it is dispelled by considering the volume of trading before and after. On Friday, Aug. 25, the volume of wheat future trading on the Chicago Board of Trade was 30,944,000 bus., and the open interest 96,529,000 bus. Four weeks later, Friday, Sept. 22, the volume was only 17,087,000 bus., and the open interest 76,568,000 bus., a decrease of 20,000,000 bus. in all futures. Thus the open interest now is about one-third of what the maximum was in September, 1929, 243,000,000 bus.

Country Buyers Grading Grain More Accurately

Country elevator operators who have stored wheat covered by a CCC loan for farm patrons have come to recognize the necessity of correct grading because the grade specified is exactly what the farmer must deliver when he fails to repay his loan. The grading school to be held next Sunday in Minneapolis as a forerunner of the 43rd annual meeting of the Grain Dealers Nat'l Ass'n gives shippers one more chance to obtain a clear understanding of the characteristics required for each grade of grain.

Many country buyers have been ruined by overgrading their purchases, but in storing farmers grain covered by government loans, the elevator man must grade receipts more rigidly if he is to avoid loss when he ships out the farmers' grain. It is just as easy to suffer from overgrading as it is to lose by overbidding. Greater vigilance in both transactions will help country elevator operators to avoid loss.

As country buyers gain knowledge and experience in the proper classification of grain they not only make all purchases on a safer margin, but they keep grain of the same grade in a bin by itself and thus easily realize a better price for shipments.

Shippers' Profits in Cleaning Grain

Country grain shippers who are equipped to clean thoroughly all grain purchased not only reduce their losses due to dockage, but they encourage central market buyers to bid up for their shipments and escape heavy discounts.

Grinders of feed have long profited largely by removing screenings from their grain shipments and grinding the foreign matter with the products of their mills.

Every shipper fully realizes that he not only increases the grade of his shipments, but he obtains a better price for each shipment. No shipper of experience would think of depreciating the grade of his choice wheat by mixing in screenings, but many seem to overlook the fact that the removal of the objectionable foreign matter is always accompanied with a better grade and a higher price.

Regulation of Storage Kills the Business

Business men generally are so overburdened with governmental regulations and limitations that they resent any new regimentation designed to deprive the warehouseman of the privilege of running his own business.

Michigan has a new regulatory law known as Act 141 which becomes effective September 29. It provides that all elevators accepting farm produce for storage must first obtain a state license and then issue storage certificates to farmers whose produce they accept for storage and bailee will be required to pay a fee on each certificate issued. He must also file special reports and comply with the burdensome regulations provided in the Act.

Grain dealers generally are encumbered with so many unreasonable regulations and taxes, it is but natural that all should resent this new attempt of the bureaucrats to run their business. If the warehousemen succeed in spite of the regulations and the onerous fee the swivel chair artists will insist on having a part of their earnings, but if they fail the loss is all their own. The sap suckers want none of it.

Thirteen elevator operators of Clinton and adjoining counties have placed advertisements in local newspapers warning farmers that henceforth they will not accept any farm produce for storage and that delivery at the elevator will constitute a sale at the price prevailing on day of delivery. This co-operation on the part of the elevator managers in a movement to reject unreasonable regulation and taxation of business activities should give many other merchants now handicapped by bureaucratic interference courage to demand more reasonable taxes for business.

Detection of Sick Wheat Difficult

Of the seven classes of "damage" described by the U. S. Department of Agriculture as found in grading wheat the unofficial designation "sick" as applied to kernels means that the germ is dead and the protein has lost its quality.

Such wheat, altho otherwise presenting a handsome appearance, is no good to the miller and must be graded down to "sample" when the total damaged kernels exceed 15 per cent.

To the eye sick wheat has a discoloration of the body of the kernel (slightly heat-damaged but not materially discolored from heat) as a result of incipient fermentation, or has a moldy or materially damaged appearance of the germ, or mold in the crease.

To know sick wheat when he sees it the grain dealer must have previously familiarized himself with its appearance by study of samples. Sick wheat will get by the unwary.

Wheat gets sick when stored at 15 per cent moisture and temperatures of 75 to 85 degrees Fahr., so fermentation proceeds slowly. If arrested at this point the wheat may lose the wet or dank odor, but the damage has been done.

According to the late Dr. D. A. Coleman, "if under these same conditions, the mass of grain is allowed to stand for a longer time so that a considerable part of the oxygen in the air surrounding the wheat kernels is used up and a partial anerobic condition prevails a group of soil micro-organisms known as the Actinomyces will develop in the bran coat of the wheat kernels and as these organisms grow they will elaborate by-products of a characteristically earthy or musty odor, with the result that we have our musty or earthy wheat.

"These odors vary in intensity and in kind due to the fact that there are many different varieties of these organisms, each and all of whom elaborate by-products characteristically different in odor. On the other hand, if the initial moisture content of the wheat is higher, 16-17 per cent, the temperature remaining low, 75-80° F., mustiness or earthiness will immediately develop, masking all other odors. At higher moisture contents yeasty odors develop and mask everything else.

"Increasing the temperature by ten degrees with the moisture at the same levels mentioned before of course doubles the velocity of the fermentation process with the result that the various odors develop much earlier and at a

much lower moisture content, i. e., about one per cent less. Under these conditions at the higher moisture contents the wheat discolors and the so-called heat-damaged wheat makes its appearance.

"If the temperature is well over 100, between 100 and 115° F., and such temperatures are not uncommon at harvest time, the development of musty, earthy, or moldy odors does not take place. In their place sharp acid odors appear, increasing in intensity as the moisture content increases. Under such conditions discoloration of the kernels proceeds rapidly and the so-called "skin-burned," "sun-kissed," and "mahogany" kernels soon make their appearance.

"Strong and weedy odors, as well as certain types of earthy odors develop (1) when moist wheat is stacked with an excess of moisture, and (2) when stacked with a large percentage of green and damp weeds, or (3) when left in the field for some time exposed to frequent adverse weather conditions before threshing."

The wheat kernel is a living, breathing organism, and under moderate temperatures and ordinary moisture will continue to absorb oxygen from the atmosphere until fully ripe and sound with its germ and protein unimpaired by any chemical breakdown.

Transfer of Funds Hamper Canadian Futures Trading

The Canadian dollar, which had been at par with the U. S. dollar, dropped suddenly with the declaration of war; and the taking of control of foreign exchange transactions by the Dominion government, which has set up regulations that operate to curtail operations in grain futures on the Winnipeg Grain Exchange by United States firms.

Some doubt has arisen whether funds put up as margins can be withdrawn promptly and converted into U. S. dollars after the trades have been closed.

On some spreading transactions the normal profits is so small that a great difference in exchange might wipe out all profit several times over.

Three interests are disposed to wait until the atmosphere clears, the banks, the brokers and the customers.

Customers who may be bullish on the price also hesitate to trade, as the price may drop unduly on account of congestion of cash wheat, and the putting on of hedges as the grain comes from the farm.

Washington News

No taxes other than an annual \$10 license would be paid by co-operative ass'ns organized under a bill introduced in the Senate by Capper of Kansas.

A Division of Co-operatives would be established in the Department of Agriculture under a bill introduced in the Senate by Capper of Kansas.

Wheat subsidy was abandoned Sept. 8, the F.S.C.C. announced, but the flour subsidy was continued at about 10c per barrel less, until further notice.

The Sec'y of Agriculture has not yet awakened to the fact there is war in Europe and is continuing to subsidize exports of wheat flour. How does he know we may not need the flour to feed home folks?

The F.C.I.C. announced it had distributed 2,670,236 bus. of wheat to reimburse more than 11,000 growers for damage to this year's wheat crop. The value of the indemnities, covering disbursements up to Aug. 12, was \$1,424,616.

Eligible cotton growers will be permitted to vote Dec. 9 in a referendum penalizing those selling more than their quotas 3c a pound on the excess sold. By a finding of the secretary of agriculture the unrestricted sale is limited to 12,000,000 bales from the 1940 crop. Last December a similar quota was approved by 84.1 per cent of the growers voting.

No corn marketing quota referendum will be called this year, Sec'y of Agriculture Wallace announced Sept. 13, as under the A.A.A. law of 1938 the indicated quota levels for 1939 is 3,030,000,000 bus., which exceeds the sum of the 470,000,000-bu. surplus on Oct. 1 and the prospective crop of 2,523,000,000 bus. Had the supply exceeded 3,030,000,000 the referendum would have been mandatory under the law.

Oral Crop Lien Disputed

O. D. Rogers, farmer, grew beans on 3 lots of land, one his own, mortgaged his interest in the three tracts to the Colorado Rural Rehabilitation Corporation and got credit from Johnson Oil, Inc., for gas and oil to harvest the crop.

Failing to obtain settlement Johnson Oil, Inc., brought suit to recover 7,000 pounds of beans or the value thereof, alleged to be \$161, and \$50 damages, on an alleged oral agreement that the mortgagee would allow Johnson Oil, Inc., sufficient beans to pay for the entire bill for 1935, if Johnson gave the additional credit. This oral contract was disputed and the court on Jan. 30, 1939, held it not proved. Claims of the Colorado R.R.C. and of Monty Rogers, who furnished seed valued at \$92, were allowed.—Johnson Oil, Inc., v. Rogers et al. Supreme Court of Colorado. 87 Pac. Rep. (2d.) 8.

Crop Lien of Landlord

I. L. Sickler, tenant, agreed to pay R. R. Christy, landlord, \$200 and one-third of all crops. In 1937, 1,083 bus. of wheat was produced and hauled to the Geo. E. Gano Grain Corporation, Garden City, Kan., out of which the landlord was paid his share but not the \$200 cash rent for each year.

Sickler claimed that after the first year no more cash rent was to be paid.

Sickler was indebted to the Caterpillar Tractor Co., who garnished 298 bus. of wheat remaining in the possession of the grain company. Christy intervened with his claim for cash rent, but the Supreme Court of Kansas on Mar. 4, 1939, held that Christy by his failure to insist on cash rent for four or five years was bound by Sickler's oral understanding that no more cash rent was to be paid, and affirmed the judgment against Christy and in favor of the tractor company.—87 Pac. (2d) 503.

Daily Closing Prices

The daily closing prices for wheat, corn, oats, rye, barley and soybeans for December delivery at the following markets for the past two weeks have been as follows:

| | | Wheat | | | | | | | | | | | | | |
|-------------|-------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Option | Sept. | Sept. | Sept. | Sept. | Sept. | Sept. | Sept. | Sept. | Sept. | Sept. | Sept. | Sept. | Sept. |
| | | High | Low | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Chicago | ..... | 89 1/4 | 62 | 85 1/2 | 86 1/2 | 86 1/2 | 86 1/2 | 85 | 84 1/2 | 85 1/2 | 86 1/2 | 86 1/2 | 86 1/2 | 85 1/2 | 85 1/2 |
| Winnipeg | ..... | 85 | 51 1/2 | 77 1/4 | 80 1/2 | 79 1/2 | 78 1/2 | 77 1/2 | 76 1/2 | 75 1/2 | 75 1/2 | 76 | 74 1/4 | 74 1/2 | 73 1/2 |
| Kansas City | ..... | 84 1/2 | 57 | 81 | 82 1/2 | 82 1/2 | 82 1/2 | 80 1/2 | 80 1/2 | 81 1/2 | 81 1/2 | 81 1/2 | 81 1/2 | 81 | 81 1/2 |
| Minneapolis | ..... | 92 | 64 1/2 | 87 1/2 | 89 | 87 1/2 | 87 1/2 | 84 1/2 | 84 1/2 | 85 1/2 | 87 1/2 | 86 1/2 | 86 | 85 1/2 | 85 1/2 |
| Duluth | ..... | 88 | 58 1/4 | 83 | 84 1/4 | 85 | 84 1/2 | 82 1/2 | 83 1/2 | 82 1/2 | 83 1/2 | 83 1/2 | 83 1/2 | 82 1/2 | 82 1/2 |
| Milwaukee | ..... | 89 | 62 1/2 | 86 1/2 | 86 1/2 | 86 1/2 | 86 1/2 | 85 | 85 | 85 1/2 | 86 1/2 | 86 1/2 | 86 1/2 | 85 1/2 | 85 1/2 |
| | | Corn | | | | | | | | | | | | | |
| Chicago | ..... | 60 1/2 | 39 1/2 | 57 1/2 | 57 1/2 | 57 1/2 | 57 1/2 | 55 1/2 | 54 1/2 | 54 1/2 | 55 1/2 | 55 1/2 | 54 1/2 | 54 1/2 | 54 1/2 |
| Kansas City | ..... | 56 | 37 1/2 | 53 1/2 | 55 1/2 | 54 1/2 | 54 1/2 | 52 1/2 | 51 1/2 | 51 1/2 | 51 1/2 | 51 1/2 | 51 1/2 | 50 1/2 | 51 |
| Milwaukee | ..... | 60 | 39 1/2 | 57 1/2 | 57 1/2 | 57 1/2 | 57 1/2 | 56 | 54 1/2 | 54 1/2 | 55 1/2 | 55 1/2 | 54 1/2 | 54 1/2 | 54 1/2 |
| | | Oats | | | | | | | | | | | | | |
| Chicago | ..... | 38 1/2 | 25 1/2 | 36 1/2 | 35 1/2 | 35 1/2 | 35 | 34 1/2 | 33 1/2 | 34 1/2 | 34 1/2 | 34 1/2 | 34 1/2 | 34 1/2 | 34 1/2 |
| Winnipeg | ..... | 44 1/2 | 23 1/2 | 38 1/2 | 38 1/2 | 38 1/2 | 38 | 37 1/2 | 35 1/2 | 34 1/2 | 34 1/2 | 34 1/2 | 34 1/2 | 33 1/2 | 33 1/2 |
| Minneapolis | ..... | 36 | 23 1/2 | 33 1/2 | 33 1/2 | 32 1/2 | 32 1/2 | 31 1/2 | 30 1/2 | 31 1/2 | 31 1/2 | 31 1/2 | 32 | 31 1/2 | 31 1/2 |
| Milwaukee | ..... | 38 1/2 | 26 | 36 1/2 | 35 1/2 | 35 1/2 | 35 | 34 1/2 | 33 1/2 | 34 1/2 | 34 1/2 | 34 1/2 | 34 1/2 | 34 1/2 | 34 1/2 |
| | | Rye | | | | | | | | | | | | | |
| Chicago | ..... | 58 | 41 1/2 | 54 1/2 | 54 1/2 | 54 1/2 | 54 1/2 | 53 | 53 | 52 1/2 | 54 1/2 | 54 1/2 | 55 | 53 1/2 | 54 1/2 |
| Minneapolis | ..... | 55 | 37 1/2 | 50 1/2 | 50 1/2 | 50 1/2 | 50 1/2 | 49 | 48 1/2 | 48 1/2 | 49 1/2 | 49 1/2 | 50 1/2 | 49 1/2 | 50 1/2 |
| Winnipeg | ..... | 61 | 37 | 57 | 59 1/2 | 60 1/2 | 60 | 57 1/2 | 57 1/2 | 57 1/2 | 57 1/2 | 58 1/2 | 57 | 57 1/2 | 57 1/2 |
| | | Barley | | | | | | | | | | | | | |
| Minneapolis | ..... | 47 1/2 | 28 1/2 | 43 | 44 | 43 1/2 | 43 1/2 | 41 1/2 | 42 | 42 | 42 1/2 | 42 1/2 | 43 1/2 | 43 | 43 1/2 |
| Winnipeg | ..... | 49 1/2 | 32 1/2 | 48 1/2 | 48 1/2 | 47 1/2 | 47 1/2 | 46 1/2 | 46 1/2 | 45 1/2 | 45 1/2 | 46 1/2 | 46 1/2 | 45 1/2 | 45 1/2 |
| | | Soybeans | | | | | | | | | | | | | |
| Chicago | ..... | 90 | 65 1/2 | 83 | 82 1/2 | 82 1/2 | 81 1/2 | 81 1/2 | 80 1/2 | 81 1/2 | 82 1/2 | 84 | 85 1/2 | 83 1/2 | 83 1/2 |

Asked—Answered

[Readers desiring trade information should send query for free publication here. The experience of brother dealers is most helpful. Replies to queries are solicited.]

Taxation of Grain in Store

Grain & Feed Journals: Along in 1933 or 1934 the storage houses here in Amarillo were having considerable trouble with tax powers regarding the assessment of wheat in transit in their storage elevators for taxing purposes. At that time we believe that Lester Stone, of the Central Grain & Elevator Co. here, wrote to your good firm and received some very valuable information regarding court cases which have been held in the Chicago territory on the same matter.

As we recall it, these court cases were given to him by exact case numbers under the decisions of the court, the decision being in nearly every instance that wheat in transit or with tonnage behind it in terminal elevators is not subject to local taxation any more than wheat in transit in box cars.

We need some such information again. We are unable to get hold of this other information which you formerly sent and we are wondering if it is possible that you can furnish us with court cases along the above line so we can have exact reference to use in our arguments.—Burrus Panhandle Elevators, Amarillo, Tex.

Ans: The Bartlett-Frazier Co. of Chicago, won a suit against the assessor of Will County, Illinois, who undertook to assess 232,000 bus. of grain stored in one of the firm's elevators at Joliet, Ill., many years ago. The court sustained the firm's contention that the grain was in transit and not taxable, in a decision Jan. 16, 1902.

Later, however, the question was threshed out in the Supreme Court of Illinois by E. R. Bacon, of Chicago, who carried an appeal to the Supreme Court of the United States, the outcome being that the grain must be in motion to be exempt from local taxation.

Bacon had the grain in the Wabash Elevator at Chicago for the purpose of inspecting, weighing, cleaning, clipping, drying, sacking, grading or mixing; and had contracts with the railroad companies for transportation to New York or Philadelphia. The Supreme Court of the United States, in a decision rendered Feb. 24, 1913, ruled that the grain was subject to local assessment, while actually in his private grain elevator. Bacon's intentions as to subsequent movement of the grain were not controlling.

The hedge is a contract to deliver the grain

elsewhere at a future time and does not affect the present status of the grain for the purpose of taxation.

The Supreme Court of Wisconsin, 160 N. W. 1077, in *Bernhard Stern & Sons v. Badden*, City Tax Commissioner, held that the law of 1915, c. 209, providing for an occupational tax on grain in grain elevators on May 1 of each year was constitutional.

The Supreme Court of Wisconsin, in 114 N. W. 441, decided against the *Globe Elevator Co.*, holding that the grain in its elevators in Superior was taxable, although its transit was temporarily delayed pending the opening of navigation.

The Supreme Court of Minnesota, on May 31, 1907, decided in favor of the *Northwestern Elevator Co.*, Minneapolis, Minn., that the evidence was not sufficient to sustain a finding and decision that the defendant either owned the wheat in its grain elevator at Minnesota Transfer, or so treated it that it is estopped, for the purpose of taxation from denying that it owned it.

Too Much C.C.C. Corn Consigned Chicago

It was reported Sept. 19 that 1,200 cars of government loan corn had been consigned to Chicago thru a misunderstanding of instructions to C.C.C. agents.

If the cars stand on track demurrage will have to be paid, unless they are unloaded into store or reconsigned.

Tenants Let Government Corn Go

Tenant farmers who hesitate to build cribs on land not owned by them are said to be choosing to deliver the corn to the government in satisfaction of their C.C.C. loans.

Such crib room as they have is required for this year's crop.

The Canadian Wheat Board is taking between 40 per cent and 50 per cent of the current marketings; about 10 per cent is being sold on the open market and the balance is being stored for the farmers for later disposition by them.

C.C.C. Loans

The C.C.C. on Aug. 31 held 73,929,029 bus. of wheat as security for loans made in 1939; and 4,034,663 bus. as security for loans made in 1938. It owned 3,372,824 bus. additional.

Between Aug. 31 and Sept. 16 loans on wheat increased greatly, from 77,956,692 bus., to 102,534,000 bus.

By Aug. 31 C.C.C. had taken title to 11,407,712 bus. corn.

Loans, security and disbursements as of Aug. 31 were:

| | Total Collateral Held | Disburse- ments by CCC, Dollars | Loans Out- standing, Dollars |
|-------------------------|-----------------------------|---------------------------------------|---------------------------------------|
| Wheat Loans— | | | |
| 1938, | | | |
| Form A | | 12,953,734 | 2,314,617 |
| Form B, bus. 4,034,663 | | 34,056,241 | 43,956 |
| 1939, | | | |
| Form A | | 289,064 | 289,064 |
| Form B, bus. 73,922,029 | | 2,380,194 | 52,972,763 |
| Total, bus. | 77,956,692 | 49,679,235 | 55,620,402 |
| Corn Loans— | | | |
| 1933-31 | | 121,276,173 | |
| 1934-35 | | 4,323,793 | |
| 1935-36 | | 8,772,862 | |
| 1936-37 | | 46,031 | |
| '37-'38, bus. | 5,040 | 21,865,887 | 17,990 |
| 1938, bus. | 28,601,592 | 16,576,163 | 16,492,772 |
| '38-'39 bus. | 229,407,508 | 132,343,917 | 132,165,111 |
| Total, bus. | 258,014,140 | 305,204,829 | 148,675,874 |

Coming Conventions

Trade conventions are always worth while, as they afford live, progressive grain dealers a chance to meet other merchants from the same occupation. You can not afford to pass up these opportunities to cultivate friendly relations and profit by the experience and study of others.

Oct. 2, 3. Grain and Feed Dealers National Ass'n, Nicollet Hotel, Minneapolis, Minn.

Oct. 12, 13. Michigan Feed Manufacturers and Dealers Ass'n, East Lansing, Mich.

Oct. 16, 17. The Farmers Elvtr. Ass'n of Nebraska, Omaha, Neb.

Oct. 19, 20. Southern Mixed Feed Manufacturers Ass'n, Biltmore Hotel, Atlanta, Ga.

Oct. 20. Texas Seedsmen's Ass'n, Adolphus Hotel, Dallas, Tex.

Oct. 20. Nebraska Grain Dealers Ass'n, Fontenelle Hotel, Omaha, Neb.

Jan. 23, 24, 25. Farmers Grain Dealers Ass'n of Iowa, Savery Hotel, Des Moines, Ia.

Feb. 6, 7, 8. Farmers Grain Dealers Ass'n of North Dakota, Bismarck, N. D.

Mar. 31, Apr. 1, 2, 3. Society of Grain Elevator Superintendents, Royal York Hotel, Toronto, Ont.

May 23. Grain, Feed and Millers Ass'n of Missouri, Hoxsey and Ben Bolt Hotels, Mexico, Mo.

War Affecting the Grain Trade

Belgium has prohibited the export of all cereals.

A War Supply Board will be created for Canada, Finance Minister Ralston has announced.

Beer in Germany has been reduced in strength to 2½ and 3 per cent alcohol, to conserve barley reserves.

A British Commission to purchase war supplies in Canada has arrived at Ottawa. Admiral Sir Percy Addison is said to head the delegation.

War risk insurance on steamers carrying grain and other commodities to the United Kingdom has been assumed by the British government.

Belgium has abolished the 25 per cent import duty on wheat; and the requirement of home grown wheat compulsorily used by millers has been reduced from 40 to 10 per cent.

All Australia's wheat crop will be purchased by the commonwealth government for the duration of the war, and marketed thru a compulsory pool. All stocks on hand are requisitioned immediately.

Portland, Ore.—The German ship *Este* of the North German Lloyd, anchored in the Dutch West Indies, now has aboard several parcels of grain which were loaded here bound for the Continent.—F.K.H.

Distributors holding stocks in store in the London area may continue to supply the immediate requirements of their regular customers. Such sales from stock must be for account of the London Port Area Grain Com'ite, and at a price which will be fixed subsequently.

Practically all British tonnage in Canadian waters is being commandeered by the British government so as to be available to form part of convoys. As illustrations of the risks involved, freight rates as high as 33 cents have been paid from Canada to Scandinavian ports, including insurance, whereas 9 cents is quoted to the United Kingdom under convoy with the British government taking the risk of loss at sea.

"Food Ministry" is the new name of the British food defense department, which will have the sole right to import essential foodstuffs into the United Kingdom. Acquisition of foreign supplies has been delegated to a general supplies division; and certain individuals have been designated as buyers. Imports of some foodstuffs will operate under license. Purchases abroad will be made while prices are low, but actual shipment will be deferred.

From Abroad

Belgium has bought a large quantity of Argentine wheat at low prices.

Australia began price control of foods and other goods at the closing level of Aug. 31.

All overseas grain exporting countries have decided to abolish their subsidies and to compete on an equal basis.

Explosion in an oil cake mill at Liverpool, Sept. 14, destroyed the plant and seriously injured more than 30 persons.

Argentina's Wheat Board is reported to have purchased 308,000,000 bus. of wheat and exported 115,000,000 bus., besides having contracted to ship 37,000,000 bus. more.

Fifteen large and medium sized grain elevators and about 1,000 new grain storages, with an aggregate capacity of 1,775,000 tons, have been established in various parts of Russia. In addition to elevators at Voroshilovgrad, Biish, Barnaul and Rybinsk, there are reported to be other new installations in the Rostov, Kursk, Orel, Chkalovsk, Novosibirsk and other provinces.

The National Ass'n at Minneapolis Oct. 1-2-3

To Grain and Feed Dealers Everywhere

On behalf of the officers and the Minneapolis members of the Grain and Feed Dealers National Ass'n, I wish to extend to all members and non-members alike, who are in any way interested in the handling or processing of grains a most hearty invitation to attend the forty-third annual convention of our Association, to be held in Minneapolis October first to third.

These are trying times, which naturally throw us closer together. In addition to giving you an opportunity to hear speakers of national prominence, we have arranged for a number of breakfast and luncheon meetings, which will give everyone an opportunity to take part in the discussions and express his opinions on matters that affect him most.

Your Minneapolis hosts are making preparations to make your stay in the Country of Ten Thousand Lakes a most enjoyable one.

Very sincerely yours,

O. F. BAST, President.

Minneapolis, Minn.

New Grain Cars on Weighmasters Program

A discussion covering the advantages and disadvantages of the inner linings of grain cars with the new corrugated ends is slated for the 22nd annual meeting of the Terminal Grain Weighmasters National Ass'n, which will be held in the Nicollet Hotel, Minneapolis, Minn., Oct. 1, opening at 9 a. m.

Other interesting subjects on the program of this meeting, which will be held the day before the regularly scheduled convention of the Grain & Feed Dealers National Ass'n in the same place, include a uniform shippers' weight card, the position of underwriters on dust suction applied to grain as it is unloaded, the problem of supporting efficient weighing departments on the present weighing fees, and the wages and hours law.

Opening the meeting will be the report of President Clay Johnson of Peoria. Closing the session, just prior to the election of officers, will be the report of Sec'y-Treasurer H. R. Clark, Omaha.

The meeting will adjourn at noon, and enjoy one of the excellent luncheons that have always been a feature.

Grain Standards Before Grain Inspectors

E. J. Murphy, acting chief of the grain division of the Agricultural Marketing Service, will review the United States Grain Standards Act from the Washington angle, before the 38th annual convention of the Chief Grain Inspectors National Ass'n, in the Nicollet Hotel, Minneapolis, Minn., Oct. 1. The meeting will open at 2 p. m. with the annual address of President J. H. Frazier, Philadelphia.

A comparative discussion by the inspectors, in which all will take part, will center around the Moist-O-Meter and the Steinlite Moisture Tester, electrical moisture testing devices that, like the Tag-Heppenstall Moisture tester, have greatly speeded the business of checking the moisture content of grains at country and terminal elevators.

The wages and hours law, and whether grain inspection fees are high enough to maintain efficient inspection departments are other subjects that will come before the inspectors.

The report of Sec'y-Treasurer Harry R. Clark, Omaha, and the election of officers will complete the program. Present officers of the ass'n include those named, Vice-President A. A. Breed, Milwaukee, and Directors S. A. Holder, Indianapolis, and F. B. Tompkins, Peoria.

Changes in Program of National Ass'n Convention

Changes have been made in the final draft of a program for the 43rd annual meeting of the Grain and Feed Dealers National Ass'n, in Minneapolis, on Oct. 2-3.

F. A. Theis, Kansas City, Mo., will speak on the Monday morning general convention program in place of Mr. Brockington of Winnipeg, who was unable to come because of war conditions. Mr. Theis is second vice-president of the National Association, is immediate past-chairman of the National Grain Trade Council, and recently was named a member of Sec'y Wallace's National Agricultural Advisory Council. No man in the grain trade in America is better qualified to discuss the position that this trade may occupy during the European war, and in the unexpected event of American participation in the war. Mr. Theis will follow President O. F. Bast on the Monday morning program.

F. P. Heffelfinger of Minneapolis, chairman of the National Grain Trade Council, will preside at the Monday noon luncheon, where the principal speaker will be Dr. J. W. T. Duvel, chief of the Commodity Exchange Administration, Washington, D. C.

Administrator R. M. Evans of the Agricultural Adjustment Administration, has confirmed his place on the Tuesday morning program, and his talk will be one of the outstanding program features of the convention.

A. F. Seay of St. Louis, a speaker on the feed men's program on Monday afternoon, is ill, and his place will be taken, according to plans this week, by Ralph M. Field, president of the American Feed Manufacturers Ass'n, Chicago.

The meeting of the Federation of Cash Grain Commission Merchants' Ass'ns will open at a breakfast meeting on Monday, at 8 o'clock instead of Tuesday morning as formerly announced.

The registration desk will be open on the mezzanine floor of the Nicollet Hotel, convention headquarters, after 2 o'clock Sunday afternoon, Oct. 1. The registration fee this year is \$3.50.

A condensed program of the 43rd annual meeting of the Grain and Feed Dealers National Ass'n follows:

Sunday, October 1

- 9:00 a. m.—Annual meeting, Terminal Grain Weighmasters National Ass'n.
 - 9:30 a. m.—Opening, annual Grain Grading School, Federal Office building.
 - 10:00 a. m.—Opening, conference of secretaries of affiliated associations.
 - Noon—Luncheon, association secretaries.
 - 2:00 p. m.—Secretaries of affiliated associations.
 - 2:00 p. m.—Opening of registration, mezzanine floor, Nicollet Hotel. Fee—\$3.50.
 - 4:00 p. m.—Reception for visiting women.
 - 5:00 p. m.—Business session, Board of Directors, National Ass'n.
 - 6:00 p. m.—Annual officers' dinner, National Ass'n, "in honor of Henry L. Goemann."
- (State commissioners of warehousing plan an informal meeting sometime Oct. 1.)

Monday, October 2

- 8:00 a. m.—Breakfast meeting, association secretaries.
- 8:00 a. m.—Breakfast meeting, Federation of Cash Grain Commission Merchants Ass'ns.
- 8:00 a. m.—Breakfast meeting for members of "Circle."
- 8:00 a. m.—Meeting, Nominations and Resolutions committees.

8:00 a. m.—(Tentative) breakfast meeting, Nat. Grain Trade Council officers.

10:00 a. m.—General Convention session. Speakers include: W. H. Mills of the Minneapolis Chamber of Commerce; Governor Harold Stassen of Minnesota; President O. F. Bast of the National Ass'n; F. A. Theis of the National Agricultural Advisory Council.

12:00 Noon—Council luncheon, for discussion of futures marketing. F. P. Heffelfinger presiding as chairman of the Nat. Grain Trade Council; Dr. J. W. T. Duvel of Commodity Exchange Administration, Washington, D. C.; President John McCarthy of Chicago Board of Trade, and others.

2:00 p. m.—Feed Men's annual conference. Chairman E. C. Dreyer of National Ass'n committee, presiding. Speakers include W. H. Kuehn of Millers National Federation; F. W. Lipscomb of Springfield, Mo.; President Ralph M. Field of American Feed Manufacturers Ass'n, Chicago; L. H. Patton of Glencoe, Minn.; Arthur F. Hopkins of Boston, Mass.

(Afternoon entertainment for visiting women is provided by Minneapolis hosts.)

2:00 p. m.—Annual meeting, Chief Grain Inspectors National Association.

5:30 p. m.—Annual men's entertainment, by Minneapolis hosts.

Tuesday, October 3

8:00 a. m.—Breakfast meeting, association secretaries.

8:00 a. m.—Breakfast meeting, nominations and resolutions committees.

10:00 a. m.—General convention session. Talks by R. M. Evans, administrator of The Agricultural Adjustment Administration, Washington, D. C.; M. R. Glasier of the Institute, Chicago, Ill.; annual business session, with election of officers and adoption of resolutions.

12:00 Noon—Luncheon conference, new Board of Directors.

12:00 Noon—Entertainment for visiting women.

2:00 p. m.—Annual golf tournament.

7:00 p. m.—Annual banquet. Speaker, Bernard H. Ridder, publisher of the St. Paul Dispatch-Pioneer Press. Entertainment and dancing.

Meeting of National Grain Trade Council

Routine business was transacted at the annual meeting of the National Grain Trade Council Sept. 15 at the Union League Club, Chicago.

Officers elected for the ensuing year are: chairman, F. P. Heffelfinger, Minneapolis; vice chairman, F. A. Theis, Kansas City; sec'y, Ray B. Bowden, St. Louis, and assistant sec'y, Ron Kennedy, Des Moines.

Among those present Paul Rutherford, Minneapolis, represented the Terminal Elevator Grain Merchants Ass'n; Geo. E. Booth, Chicago, the Federation of Cash Grain Commission Merchants Ass'ns; O. F. Bast, Minneapolis, and Ray Bowden, the Grain & Feed Dealers National Ass'n; Frank A. Theis and E. C. Meserve, Jr., the Kansas City Board of Trade; F. P. Heffelfinger and Mr. Bast the Minneapolis Chamber of Commerce; W. R. McCarthy, the Duluth Board of Trade; W. A. Brown, the St. Louis Merchants Exchange; Edward LaBudde, the Milwaukee Grain & Stock Exchange; J. T. Buchanan, the Omaha Grain Exchange; R. J. Barnes and John H. Frazier, the Philadelphia Commercial Exchange; R. M. Morgan, the New York Produce Exchange; H. H. Dewey, the Peoria Board of Trade, and J. B. Stouten, the Buffalo Corn Exchange.

Letters from the Trade

[The grain dealers' forum for the discussion of grain trade problems, practices and needed reforms or improvements. Dealers having anything to say of interest to members of the grain trade are urged to send it to the Journals for publication.]

Profits (?) from Erection of Steel Bins for AAA

Grain & Feed Journals: The government program for storing shelled corn in tight steel bins is not taking hold here in Indiana. A few have contracted to erect and fill these bins much to their sorrow. Some of them report that it costs over 2c per bushel to erect the bins. This leaves them only 1c for hauling and shoveling the corn into the bins.—Goodrich Bros. Co., Winchester, Ind.

Cost of Erecting Steel Bins for CCC's Corn

Grain & Feed Journals Consolidated: I have been on the road almost every day conferring with county committees and checking costs of erecting CCC's steel bins. To date I have found no case where actual accurate checks have been made that show erection costs less than those established at Cedar Rapids, an itemized statement of which follows:

In response to proposals of county AAA committees throughout Iowa that country elevator operators take over and render all services at their stations in connection with corn tendered to CCC on loans, including the erection of bins, receiving, weighing, grading, filling and policing, a number of meetings were held by grain dealers all of whom were at a loss as to the cost involved in erecting the steel bins.

In order to arrive at this cost before assuming a contract, the Linn County AAA committee arranged to have a bin shipped to Cedar Rapids and erected. A close check was kept on time of labor and all items of expense. The following statement is detailed to permit the estimation of costs in localities where the prices of materials and labor may vary. It was agreed by the county committee as well as ourselves, that the labor was efficient and that there was no waste of time.

Cost of foundation alone (built according to specifications) was \$19.35, which added to the bin erection cost of \$26.22 made the total cost of construction \$45.57, equal to 2.28c per bushel on this 2,000 bushel tank. Eight men were employed in the erection of the bin; two of them were experts representing the factory from which the bin was shipped, knocked down:

| | |
|--|---------|
| 54 clay blocks at \$88.50 per 1,000.... | \$ 4.80 |
| 5½ yards of sand at \$1.50 per yard delivered | 8.25 |
| Wire around the blocks to hold them in place | .70 |
| 16 hours of labor on the foundation at 35c | 5.60 |
| 73½ hours of labor on the erection of bin at 35c | 25.72 |
| Guy wire | .50 |

Total cost of erecting one bin.....\$45.57

1. In considering a contract for this work there would have to be taken into account the cost of furnishing tools as well as workmen's compensation insurance, which would be important, and the land rental for tanks.

2. In view of the fact that portable power and elevating machinery will have to be supplied, as well as extra labor due to the bins in most cases necessarily being located at some distance from the elevator,

3. the writer estimates the cost of receiving, weighing, grading and filling tanks will be fully as great as that of receiving, weighing,

grading and loading into cars, for which CCC allows us 2c per bushel.

4. On the basis of this estimate elevator operators assuming the whole job should be entitled to at least 4½c per bushel, or \$90.00 per bin, and that low estimate must be based upon the ability to secure labor as low as 35c per hour.

The county com'ites are endeavoring to get country elevators to sign contracts for erecting the tanks, receiving the grain and filling and policing the tanks for three cents or less per bushel, and only in a few cases have they been successful.

Dealers generally seem to be inclined to agree that if the county com'ites will erect the tanks the dealers will weigh, grade and fill and police the tanks for 2c per bushel and it is my personal opinion that CCC will have to come to some such terms in order to get the work done as time is becoming an important factor.—S. W. Wilder, Cedar Rapids, Ia.

War and Wheat Prices

Canada in 1914 produced 160 million bushels of wheat as against an estimated 450 million bushels this year, and at the same time the total production in Europe in 1914 was only about 900 million bushels, and last year and this season production will be almost double that figure. In addition to this, the world has at the present time a surplus of about 1,200 million bushels to add to the abundant harvest. Included in this surplus, or carry-over, are large emergency stocks that have been bought up by the governments of France and Great Britain, at times when prices were low, to take care of the time when due to war it might prove dangerous to have to depend on immediate shipments of wheat from Canada.

So far as stocks are concerned, then, the situation is roughly this, the countries of Europe, to which we hope to sell our wheat, have on hand roughly about twice as much wheat as they had when war broke out in 1914. When they are ready to buy more wheat from Canada to replenish these stocks, they will find that Canada can supply them with about THREE TIMES AS MUCH WHEAT AS IN 1914.

If that is true about stocks, are we justified in thinking that prices for wheat in the next few months will rise any more rapidly than they did in 1914? Between March and the last week of July, 1914, the price of No. 1 northern wheat averaged about 90 cents per bushel. As tension increased, prices rose to about \$1.10 per bushel during the middle of August, two weeks after the war started.

This price was fully maintained but prices only fluctuated between \$1.10 and \$1.20 per bushel for the next six months. So that in ten months between March, 1914, when the war was still some distance away until December, six months after it started, prices rose only twenty to twenty-five cents a bushel, and that was in a year when Canada's crop was below normal.

This year prices have risen 25 to 30 cents in a few days, and this year Canada has the fourth largest crop on record and the largest since 1928.

What has happened this time is roughly as follows. When hostilities broke out in Europe, there was an immediate rush of buying by the flour mills and the legitimate consumers of wheat to try to stock up some of their require-

ments. Prior to this the crop looked so large, there was an abundance of wheat for sale all over the world, and buying had been largely a hand-to-mouth proposition that was aimed at taking care of immediate requirements only. In addition to this, the farmers of Western Canada immediately felt that here was a situation that was likely to provide them with a price that was higher than the initial payment promised by the Government thru the medium of the Canadian Wheat Board, and they stopped selling their wheat. The result—buyers trying to get in their requirements and no one willing or in a position to sell the wheat that was being harvested. The market immediately found a higher level, and at the present time purchases and sales are being made freely at a price that is some 20 to 25 cents higher than the previous price.

Whether the market has found its trading level, or whether the price will continue with a further rise cannot be accurately prophesied, but it is our considered opinion that a steady rise in price cannot be justified by past history, and the only comparative condition we know of was the situation in 1914, when stocks were very much smaller than this season and prices did not rise to any great extent, while in addition to this, when in 1915 Canada produced a very large crop, prices fell again and the average price for that crop was only slightly over \$1.00 and during August and September price went down as low as 85c per bushel.

The world still has the same prospective surplus it had two weeks ago when the price of wheat was about 55c per bushel. In a year or two, if this conflict develops into a major war involving the Balkan countries, Italy and Spain, and other European countries that produce large quantities of wheat, then the wheat acreage in Europe may be reduced to the point where they will take all the Canadian wheat that is available. If that happens, then the whole outlook will change, but temporarily, at least, in our opinion, there is no justification for anticipating prices on the basis of the individual's memory of those days of '17.—McCabe Bros. Grain Co., Ltd.



Geo. S. Mathieson, President-Elect, Winnipeg Grain Exchange

Crop Reports

Reports on the acreage, condition and yield of grain and field seeds are always welcome.

North Platte, Neb., Sept. 22.—Everything very dry and hot out this way.—W. H. Cramer Const. Co.

Huntingburg, Ind.—With pastures drying up in some sections of southern Indiana the demand for millfeed has increased during the past few weeks.—W. B. C.

Kansas City, Mo., Sept. 20.—Two cars of new yellow corn from Missouri reached the Kansas City market today. Quality of the new grain was very good and moisture content was unusually low for first arrivals due to the recent dry weather.

Shelbyville, Ind.—Shelby County's 1939 corn crop, according to an estimate of H. W. Dwight Brinson, county agent, will yield 53 bus. to an acre—15 bus. above the ten-year average of 34.6. The total yield is expected to reach 4,445,000 bus.—W. B. C.

Topeka, Kan., Sept. 11.—The corn crop on Sept. 1 is estimated at 32,487,000 bus. which is an increase of 7,735,000 bus. over that expected a month earlier. This compares with 45,200,000 bus. produced last year and 80,736,000 bus. the 1928-37 10-year average production.—H. L. Collins, Agr. Statistician.

Springfield, Ill., Sept. 20.—Progress of corn during the week has placed the bulk of the crop practically out of danger from frost. Some damage has been caused by too rapid drying, particularly with respect to late planted corn which is chaffy.—E. W. Holcomb, Statistician, U. S. Dept. of Agr.

Winchester, Ind., Sept. 16.—We now need generous rains so that the farmers can prepare their ground for wheat sowing. From all indications we will have a much larger wheat acreage put in this fall than last. Seems as though everyone remembers the very high prices during the last war.—Goodrich Bros. Co., C. C. Barnes, Exec. V.-P.

Helena, Mont., Sept. 1.—Although much smaller than the 72,349,000 bus. harvested in 1938, the 1939 wheat crop of 54,240,000 bus. is well above the 10-year average production of 35,217,000 bus. With harvest and threshing practically completed, the spring wheat crop is estimated at 33,568,000 bus.—Jay G. Diamond, Sr. Agr. Statistician.

Des Moines, Ia., Sept. 19.—"Iowa corn has established a new high record for early maturity," Leslie M. Carl, federal agricultural statistician, said today in his weekly report. "The crop now is largely made and with scattered exceptions, the prospect is for an excellent crop," the report said. The soybean outlook took a slump, he continued, because of the September heat wave.

Seattle, Wash.—The largest oat crop since 1916 is forecast for Washington. The forecast was for 10,098,000 bus., exceeding last year's small crop of 6,715,000 bus. The state's barley crop estimated at 3,312,000 bus. also was described as the largest since 1916. The total wheat production in the state this year will fall about 12,000,000 bus. below the record breaking 1938 crop.—F. K. H.

Washington, D. C.—An increased infestation of the hessian fly this year thruout a large portion of the wheat belt is shown by recent surveys made by the Bureau of Entomology and Plant Quarantine in co-operation with state experiment stations. The pest is present in moderate to extreme numbers in many localities in Pennsylvania, Ohio, Indiana, Illinois, Missouri, southern Iowa, southeastern Nebraska and eastern Kansas.—U. S. Dept. of Agr.

Springfield, Ill., Sept. 13.—The September yield per acre outlook for Illinois corn is placed at 49 bus. compared with 45 bus. a year ago. This compares with the previous high record of 48 bus. in 1937 and the 10-year (1928-37) average of 33.8 bus. Corn production outlook is for 396,557,000 bus. compared with 379,350,000 bus. in 1938, and the 10-year average of 307,592,000 bus. The largest Illinois corn production on record was 449,616,000 bus. in 1937.—A. J. Surratt, Sr. Agr. Statistician.

Toronto, Ont., Sept. 1.—Preliminary estimate of oats in Ontario as compared to 1938 (shown in parentheses) is 1939, 83,393,000 bus. (83,198,300); of barley, 15,631,500 bus. (16,649,000).—S. H. H. Symons, Dominion Statistician.

Chicago, Ill., Sept. 20.—Dry soil conditions have spread over the winter wheat belt interfering with seeding to a greater extent than in many seeding seasons. There are comments in circulation as to what would be the results under different weather conditions that may develop in the immediate future. The season is not too late for the development of a reasonable fall start if rains come soon. Heavy general rains during the next two weeks covering most of the Winter Wheat Belt are needed.—H. C. Donovan, Statistician, Thomson & McKinnon.

Winnipeg, Man., Sept. 13.—No. 1 and No. 2 northern, which make up 87% of the wheat inspected during August, are not quite equal in milling and baking quality to the corresponding grades for last year. No. 1 hard is particularly disappointing in baking quality; absorption and loaf volume are low and dough properties are inferior to those of No. 1 northern. On the other hand, the lower grades are definitely higher than the corresponding grades last year. The new wheat, grade for grade, is about equal in gassing power, crumb color and texture, to the 1938 crop.—McCabe Bros. Grain Co., Ltd.

Lafayette, Ind., Sept. 25.—Not for many years has the northern half of Indiana developed such a heavy fly infestation. We find the infestation varying from seven to 49 per cent with the average infestation for 41 counties north of Indianapolis 21 per cent, which may develop into a catastrophe if wheat growers fail to maintain the safe free date in sowing wheat this fall. We urge all wheat growers to adhere to the recommended wheat sowing date for their particular region, from Sept. 22 in the northern end of Indiana to Oct. 8 in the southern tier of counties.—J. J. Davis, Purdue University Entomology Dept.

Bluffton, Ind.—The threshing of oats has been completed. The quality was fair; yield much below normal; in fact, this crop was a failure thruout the state. On our own properties the yield was cut in half over the 1938 crop. We had some fields that did not produce a single bushel. On other fields we were only able to get part of the grain. One field of 10 acres produced 285 bus. We seeded a total of 154 acres to oats and our total yield off this acreage amounted to 1,601 bus. for an average of about 10 bus. per acre. There was a total of 51 acres that was not harvested. This gives us an average yield of 15½ bus. per acre for the the acreage actually harvested.—A. F. D.

Decatur, Ill., Sept. 16.—Feeding of new corn has been under way. Growers have been able to feed the new corn crop much earlier than usual and the corn has a better feeding quality than normal at this early date. In the last two weeks more new cribs are being constructed all over the territory. The movement of new corn will depend entirely on the market price in relation to the government price. If the market is much below the loan, the movement will not be heavy, as the major part of the crop is eligible for government loan. Some sealed corn being loaded out this week, going to terminals, and railroads are already having difficulty in furnishing an adequate supply of empties.—Baldwin Elevator Co.

Ottawa, Ont., Sept. 21.—Canadian wheat in store for the week ending Sept. 15 increased 41,221,530 bus. compared with the preceding week and increased 118,946,573 bus. when compared with the corresponding week in 1938. The amount in store was reported as 221,952,832 bus. compared with 180,731,302 bus. for the preceding week and 103,006,259 bus. for the week of Sept. 16, 1938. Wheat receipts in the Prairie Provinces for the week ending Sept. 15 amounted to 38,418,578 bus., an increase of 4,119,768 bus. over the preceding week when 42,538,346 bus. were marketed. During the corresponding week a year ago the receipts were 20,725,068 bus. Marketings in the three Prairie Provinces for the seven weeks from Aug. 1 to Sept. 15, 1939, as compared with the same period in 1938, were as follows, figures within brackets being those for 1938: Manitoba, 37,417,521 (32,546,785); Saskatchewan, 75,498,168 (40,384,432); Alberta, 27,761,442 (26,571,556) bus. For the seven weeks ending Sept. 15, 1939, and the same period in 1938, 140,677,131 and 99,502,773 bus. respectively were received from the farms.—R. H. Coats, Dominion Statistician.

Winchester, Ind., Sept. 23.—They say there is nothing new under the sun, but we have run up against something this year we have never had before. Our soybeans are being combined, they are running as low as 10% in moisture, yet being discounted very heavily on account of damaged beans. These are beans that are apparently as dry as can be, showing a fair color, but on cutting them open they are a bright green. This, the soybean mills report, is making an off color oil. Unfortunately no one knew anything about this until dealers were right in the middle of harvest and most of them will take a rather severe loss on the beans they had on hand when the mills awoke. No wheat has been sown in this territory yet. The ground is too hard and dry for preparation. Some rye was sown, most of it perished for lack of moisture. Corn is being cribbed this week, the earliest we can ever remember; however, the farmers are not letting loose of a single bushel. We haven't bought any to date. We had some reports that the hot dry weather would cause chaffy corn in the late planted fields, but we don't believe there will be much of this.—Goodrich Bros. Co., C. C. Barnes, Exec. V. P.

Minneapolis, Minn., Sept. 22.—We indicated in our Aug. 25 Bulletin that the improvement in the corn crop during August would warrant a much higher estimate than was given on Aug. 1. The Crop Reporting Board of the Department of Agriculture raised the corn production on Sept. 1 by 63 million bus., placing the crop at 2,523,092,000 bus. The private reporters indicated comparatively little change from their Aug. 1 estimates; the average being 7 million less. The warm weather since Sept. 1 has no doubt caused some loss to the corn crop, especially to the poorer areas in the Western States which are on the fringe of the main corn belt. This particular area showed some improvement during August but it has doubtless lost its gain during the hot weather of September. The late planted corn suffered from being forced to maturity by the intense heat which may result in some light weight, chaffy corn. The adversely affected areas, however, are only a very small percentage of the total. The outlook at present over the Southwest is not encouraging. Heat and drought have held up plowing and preparation of the ground, which will delay seeding. Early sown wheat is dying from lack of moisture and some fields have not germinated. Many sections in the Eastern States are in the same predicament. The delay may be advantageous, as many districts will now be safe from the Hessian Fly menace. Generous rains will be required soon over the whole winter wheat area to sow and develop the intended acreage for next year's crop.—Cargill Crop Bulletin.

Grading of Kansas City Wheat

During August the 1,917 cars of wheat received at Kansas City were graded 89.4 per cent or 1,714 cars No. 3 or better, and 8 cars smutty. In August, 1938, 6,954 cars, or 54.1 per cent were graded No. 3 or better. The grading follows, by carloads:

| Grade | Dark Hard | Hard | Red | Mix. | Other |
|--------|-----------|------|-----|------|-------|
| No. 1 | 225 | 71 | 19 | 11 | 9 |
| No. 2 | 371 | 242 | 258 | 56 | 5 |
| No. 3 | 133 | 101 | 173 | 39 | 1 |
| No. 4 | 22 | 24 | 31 | 2 | .. |
| No. 5 | 3 | 5 | 10 | 1 | .. |
| Sample | 21 | 31 | 41 | 12 | .. |
| Total | 775 | 474 | 532 | 121 | 15 |

Protein in Kansas City Wheat Receipts

Wheat arriving at Kansas City during August tested an average of 13.75 protein on 1,764 cars, against 13.46 per cent on 6,666 cars a year ago.

For the first two months of the new crop year the Kansas Department inspected 12,635 cars with an average of 13.64 per cent protein against 13.13 per cent on 17,164 cars in July and August last year, while the Missouri department inspected 10,124 cars with an average of 13.39 per cent, compared with 12.73 per cent on 16,876 cars in the first two months of the preceding year.

Ohio Dealers Discuss Sealed Corn and Stored Wheat Settlements

Procedure in liquidating Commodity Credit Corp. loans on stored wheat in terminal elevators, C.C.C. methods in handling sealed corn, and revision in the state tax assessment methods on elevators and mills, were absorbing subjects before the business session of 125 delegates to the fall field day of the Ohio Grain & Feed Dealers Ass'n, held at the Greenville Country Club, Greenville, O., Sept. 19.

PRESIDENT H. R. WOOLEY, Pickerington, presided at the business session, aided by Sec'y W. W. Cummings, Columbus.

State Tax Assessment Revision

ELTON KILE, Kileville, second vice president of the ass'n, and first speaker at the business meeting in the ball room of the Country Club, explained that a great deal of confusion reigns among Ohio county tax auditors in classification of elevator and mill properties for tax purposes. The old method of establishing values for tax assessments classified real estate, buildings, and machinery together. The revised tax law, as enacted by the Ohio legislature in 1932, requires real estate and machinery to take separate classifications. Some county auditors continue to use the old method but most are now trying to levy a tax as required by the new law, and this has created a puzzling problem for grain elevator operators.

Grain dealers fear, said Mr. Kile, that in the reclassification of their properties, real estate will enjoy no compensating revision downward in its tax assessment valuations when machinery and equipment is made subject to personal property taxes, and that the result will be a general increase in their taxes.

SEC'Y CUMMINGS pointed out that if total valuations and total taxes were not raised in the revision, the revision could mean an advantage to the grain dealers. Allowed depreciation annually on real estate is only 3%, while on personal property it is 10%. The lowest point in allowed depreciation is 20% of the original value.

PRESIDENT WOOLEY declared grain dealers have some rights. As tax payers they bear much of the expense of maintaining city, county, state and federal governments. Government employees are paid with these taxes, and grain dealers should not be easily scared into acceptance of unreasonable assessments.

Selling Loan Wheat

C. W. VAN SCHOIT, Columbus, Ohio, A.A.A. com'iteman, said that the Commodity Credit Corp. has issued instructions to state A.A.A. com'ites to cooperate as far as possible with the regular channels, thru which grain moves, when accepting corn for storage, or selling wheat now held in terminal elevators under C.C.C. loans.

"The price of wheat, under the influence of War excitement, has advanced enough to permit farmers to liquidate their loans on this grain. This situation, of which many farmers wish to take advantage, arose unexpectedly, and found A.A.A. offices with no method of procedure which permitted farmers to liquidate readily. Economics appear to demand sale of the wheat at the terminal where it is stored, but such procedure does not include all of the 'channels of trade.'"

"In a confused series of statements that filled the minds of delegates with uncertainties, Van Schoit said, procedure has been to let the local bank sell the wheat in the terminal, and settle with the farmer. This has proved unsatisfactory. 'Bankers are not grain dealers,' admitted Van Schoit. The procedure is cumbersome, not suited to quick action.

"Difficulties have surrounded sale of small

parcels of wheat in terminals, said the speaker. The terminal elevators want to deal in carload lots, whereas wheat from several farmers may have been in the same car. All farmers whose wheat was shipped in the same car do not want to liquidate at the same time. This complicates sale of the carload and delivery of warehouse receipts to buyers, since each farmer has a warehouse receipt covering his portion of the grain in a car.

Mill buyers boosted premiums so high during the movement of wheat, that terminal elevators, unable to see a profit in carrying wheat, failed to build up free stocks, according to a leading terminal operator. Only wheat in terminal houses is that carrying C.C.C. loans. The elevators are in no position to sell this wheat in small parcels, as many farmers wish, because the milling-in-transit privileges, under which the grain was shipped, contemplates movement in carloads. At the same time the elevators are not anxious to buy because the basis has continued unprofitable."

ELTON KILE could understand no reason for difficulty in procedure in selling C.C.C. wheat. "We have made arrangements with our local bank whereby we can sell stored wheat on the instructions of the farmers who wish to take up their loans. The bank will handle the papers afterwards, instead of first going thru the procedure of making a loan to the farmer, then paying off the C.C.C., then selling the wheat, and recovering its loan."

G. E. O'BRIEN, Greenville, announced that at a millers' meeting a few days earlier, he had found virtually all millers short of wheat, many of them attempting to buy wheat from the C.C.C.

Sealed Corn

MR. VAN SCHOIT said, "Sealed corn is another problem. The C.C.C. wants to re-seal as much of the 1937 and 1938 crop on the farms as possible and holds a 7c storage rate out to farmers as an inducement to keep this corn in their cribs. Intent of the C.C.C. next is to store in local elevators. When available coun-

try elevator space is filled, county com'ites will turn to steel bins. Only a few counties will put up steel bins in Ohio. Where steel bins cannot fill storage requirements, the corn will be shipped to terminals.

"Off grade lots of corn will be sold. Less than carload lots will necessarily be sold to local elevators, since they cannot be shipped economically.

"Country elevator operators are allowed 1/4c per bu. for turning C.C.C. corn to keep it in condition. The only time the country elevator operator is responsible for grade and quality is when the corn goes out of condition thru his carelessness or neglect."

"Responsibility for handling and storing the sealed corn delivered by farmers rests with the country A.A.A. com'ites. County com'ites sit between the C.C.C., the farmer, and the country elevator operator."

B. R. HOAGLIN, Scott, complained that the Van Wert county com'ite had refused his offer to erect and fill steel bins at Scott, and is attempting to divert all deliveries for storage in steel bins to Van Wert where a bin farm will be erected. Farmers, he said, are objecting to the long haul, want to deliver to local points. In Paulding county, where Hoaglin has an elevator near the county line, the Paulding county com'ite is permitting him to put up bins and handle locally delivered sealed corn.

Van Schoit agreed to see Hoaglin after the meeting and straighten out this tangle. "We want to keep sealed corn as close to the point of origin as possible," he said.

Unlike wheat, where War scares have boosted the price over 90c to permit liquidation of loans at many points, corn is likely to stay in store for some time. Not only is there a big supply, but the C.C.C. cannot call the loans unless the price goes over parity, which now stands at about 80c.

E. C. EIKENBERRY, Camden, pointed out that a farmer should have no difficulty in liquidating his wheat loan. The wheat can be sold at the terminal, and the whole money procedure can be handled thru sight drafts as it is thruout the entire grain trade. Mr. Eikenberry commented that the liberal of today is the conservative of tomorrow. The degree of liberalism held by an individual rests on his ability to adjust himself quickly to new conditions and new methods. The efficiency with which loan wheat may be liquidated depends



Gaynor E. (Boots) O'Brien, Greenville, last year's president of Ohio Grain, Mill, & Feed Dealers Ass'n, putts out on Greenville course during Ass'n's Field Day. With Him are George Dewey, South Charleston; O. M. McBee, Springfield, and Dave Deardorf, Greenville.



J. R. North, Groveport, O., won golf tournament at Ohio Grain, Mill & Feed Dealers Ass'n Field Day.

upon the liberalism of those who work out the procedure.

E. A. GOBEAUX, Greenville's "silver-tongued orator" whose business is banking, held that the banking business is simple in operation. Farmers, he believed, have changed their attitude toward business, especially those who have had experience in cooperatives. They realize now that business men must have a safe margin in order to exist, and earn the profit they need to cover expenses.

Adjourned *sine die*.

The Ass'n Luncheon

LUNCHEON was served cafeteria style in the Club House. Helping themselves to the home-cooked food, grain dealers consumed most of the potato salad, baked beans, relishes, pie, and coffee available, left little for the cooks to carry away.

Entertainment at Greenville Meeting

Immediately following the luncheon, 19 golf players changed their clothes, seized their clubs, and headed for the 18 hole Greenville course, to play the annual golf tournament. The battle was furious, but late players carried away the bulk of the honors.

Topman was 52 year old J. R. North, of Groveport, whose 74 won him an electric clock. Second was George Dewey, South Charleston, with a 78 that brought him a carton of cigarettes. Third was Fred Terry, Toledo, with an 83 that won a thermos bottle. Tying for fourth place was Dave Deardorf, and G. E. (Boots) O'Brien, both of Greenville, both taking an 84 on their home course, the former walking off with a coffee pot, the latter with a corn popper. Sixth was O. M. McBee, of Springfield, whose 85 gave him a half dozen golf balls.

The more than 100 grain dealers and their ladies who did not take golf too seriously, preferred to talk about how the Cincinnati

Reds would win the World's Series pennant, filled the afternoon with games, carried away more than 60 prizes consisting of electric clocks, coffee percolators, bath mats, flash lights, and kitchen ware, in the order of their winning. First winners were barred from further competition.

In Attendance at Greenville Meeting

PLENTY of note pads and pencils were made available to delegates by Carl F. Berger, and J. W. Short of the Sidney Grain Machinery Co.

SALT men present included Gilbert F. Martin, who advertises himself as the "little man with the big cigar," Sidney Marx and Dan Yount.

SEED merchants were V. H. Jackson, and H. F. Hupman, Cincinnati, and H. E. Frederick, and H. K. Scott, Marysville.

SHEET metal salesmen were W. A. Felix, and George Gribble.

INTERIOR brokers included O. E. Wilkinson, Sidney.

BUFFALO representatives included H. H. Richardson, F. E. Smith, Mr. Witte; and C. B. Weydman, of Eastern Grain Elevator Corp.

TOLEDO sent P. M. Barnes, Sec'y A. E. Schultz, W. A. Boardman, G. R. Forrester, Wm. P. White, L. J. Schuster, M. H. Faulking, Fred Terry, George (Woody) Woodman. Toledo is making a bid for the Grain & Feed Dealers National Ass'n convention in 1940. Its Board of Trade members were talking it up.

CINCINNATI sent Berkshire Terrill.

R. P. REID represented Seed Trade Reporting Buro, told about the speed with which moisture tests can be made on the Steinlite moisture meter.

FROM CLEVELAND came F. E. Watkins. REGISTRATION was conducted by R. S. Castle, of The Mill Mutuals.

PURVEYOR of cod liver oil was R. H. Wyman.

SOLE INDIANA representative was Wm. G. Haug of Winchester.

OHIO SHIPPERS included E. L. Allton, St. Paris; Henry Ronnebaum, Montezuma; Elton N. Kile, Kileville; H. R. Wooley, Pickerington; Alfred P. Eier, Nevada; C. A. Hiegel and Floyd E. Hiegel, Leipsic; L. W. and W. C. Dewey, Blanchester; G. M. Dewey, South Charleston; R. C. Caluelage, Delphos; J. M. Jennings, Beaverdam; Victor E. Herter, Jr., Arcanum; Wm. Wilgus and B. Russell, Hilliards; B. R. Hoaglin, Scott; E. M. Ellis, Don Zerkle, M. C. Schultz, Urbana; H. E.

Jarvis, Dayton; Donald B. Walker, Circleville; Edgar M. Hieber, Lykens; J. M. Armacost, Campbellstown; L. A. Gilliland, Van Wert; G. C. Heist, Cavitt; W. M. Myers, and J. Wm. Myers, Lockbourne; Glen M. Pontius, Everett Early, Lowell Thomas, Waynesville; H. H. Ditrack, Hamilton; Charles D. Keinwell, and W. H. Brown, New Madison; Clarence Steffen, G. E. O'Brien, C. D. Cole, and O. P. Hall, Greenville; C. E. Forney, Dayton; E. C. Eikenberry, Camden; E. E. McConnell, McGuffey; Alvin Steffen, Ansonia; D. W. Mahaffey, Morral; Roy O. Roeth, Houston; C. H. Gwinn, Sidney; A. H. Fuller, Spencer; P. G. Plank, Creston; R. E. Crone, Osborn; G. O. Weines, Rosewood; O. J. Chamberlan, North Lewisburg; W. C. Youmans, Plain City.

Solution of Grain Dealer's Credit Problems

Book accounts are still a major problem to country elevator operators, says E. W. Loy, of the Greenville (O.) Farmers Exchange. If the amount of credit extended could be reduced, the elevators would have more working capital with which to finance their stocks, and could take advantage of favorable market conditions.

An effort that has met with some success in Greenville, and surrounding villages, is the forms sold to retailers who took out membership in the Darke County Credit Adjustment Ass'n. The form lists the membership, is filled out to show the name and amount of an unpaid account, mailed to the nonpay customer. It has been successful in scaring in some of the much needed money carried on member books far beyond the normal time allowed for slow accounts.

Theory behind the form is assumption by the debtor that credit information is passed freely back and forth between the members of the ass'n, and that this passing of information closes sources of credit to him. Hence, the wise course is for him to pay his debts, and keep his credit good with the elevator operators.

The form states: "The firms whose names appear hereon compose the membership of this ass'n whose object is to protect the interest of both the creditor and debtor. Your account is past due and we urge that you see your creditor at once in order that you may arrange a satisfactory settlement. . . . The most valuable asset one has is credit and it should not be abused. . . . All payments and communications are to be made to the member that you owe."



President H. R. Wooley, Pickerington, and Sec'y W. W. Cummings, Columbus, admire awards for games at Ohio Grain, Mill & Feed Dealers Ass'n Field Day.

Looking Ahead With the Soybean Industry

By E. F. "SOYBEAN" JOHNSON

[This address, delivered by E. F. Johnson, Ralston Purina Co., before the annual meeting of the American Soybean Ass'n in Madison, Wis., was prepared before the outbreak of war.]

When soybeans are harvested for ripened seed, the resulting grain has three possible uses: for seed for replanting, for export movement, and for sale to various domestic processing plants. Although approximately 12,000,000 bus. of soybeans are involved in the seeding operation, at least 50 per cent of this is seed saved by the grower himself for his own use or for exchange in the community.

Soybeans for Export—Export movement of soybeans from the United States is not only relatively new but is so deeply involved in political and economic conditions in Europe and Asia that very few deductions can be safely made. It is probable that out of the 1938 crop 4 to 5 million bushels of soybeans have moved to Europe. Most of this movement has been to the Scandinavian countries and to Belgium and the Netherlands.

In 1938 the various European countries, not including Germany and Italy, imported a total of approximately 15 million bushels of soybeans. But of this total, probably 5 million bushels were handled through Unilever and altho shown as imports into other countries, they were actually being processed in transit to Germany. In other words, the total 1938 soybean imports by various European countries which might continue to buy American beans would indicate a market for not to exceed 10 million bushels.

Germany and Italy are exempted from possible purchase of American beans due to the fact that both of these countries have contracts with Japan involving the exchange of Manchukuo soybeans for airplanes and other semi-war supplies.

Recent reports indicate that the crop of soybeans in Manchukuo will probably be 10 or 15 per cent larger than last year, the largest since 1931. This is not necessarily an important factor, as it is impossible to learn accurately how many million bushels of beans Japan must use domestically, both in feeding Japan's population and in furnishing the major food of the Japanese army in China. It is safe to assume that due to the difficulties Japan is having in establishing foreign credits, together with the sharp reductions in wheat and flour importations, the domestic demand for soybeans in Japan is far greater than indicated in the last available figures.

The third and major utilization of soybeans is found in the domestic processing plants. Of the 1938 crop, approximately 43 million bushels were used by these mills, resulting in a production of over a million tons of soybean oilmeal and between 375 and 400 million pounds of soybean oil. The price that can be paid for soybeans depends entirely upon what the resulting meal and oil will bring in a highly competitive market.

Soybean Growth in the Last Few Years: Six years ago a grand total of 76 thousand tons of soybean oilmeal represented our domestic production of that commodity. At that time various government economic groups warned the grower and the processor that any further expansion might be disastrous. This past year domestic production of soybean oilmeal has exceeded a million tons and this has moved into consumption more uniformly and consistently than was

true six years ago with the modest total production of 76 thousand tons. Reasons for this condition are of paramount importance.

All processors, regardless of the method used for removing the oil, are making a much better soybean oilmeal today than six years ago. All know much more about plant operation, heat effect on protein, and the place and proper amounts of soybean meal in all rations. Of even greater importance is the fact that the livestock and poultry feeders of the nation have proved to their own satisfaction the value of this supplement. Accurate data show conclusively that over 95 per cent of the production of soybean oilmeal goes into the feeding of livestock and poultry.

The field for sales of soybean oilmeal has broadened materially. For example, recent reports indicate that domestic soybean oilmeal has almost completely replaced Manchurian meals on the Pacific Coast. Altho records are available only for nine months (October to June inclusive), during that period 33,000 tons of soybean meal were exported. This broadening of our sales market is very encouraging, but again it must be kept in mind that this meal likewise goes almost entirely into the feeding of livestock and poultry.

Lack of Storage Handicaps Oil Marketing: Marketing of approximately 375 million pounds of soybean oil since last October has been a major task. Soybean oil is highly competitive with cottonseed oil, since between 75 and 80 per cent of the total production last year found an outlet in the edible fat group of products. This group includes our lard substitutes, salad oils and dressings, oleomargarines, and similar commodities. Due partly to a higher refining loss and a somewhat more expensive hydrogenating process (necessary to remove the "beany" taste), soybean oil usually sells at a slight discount under cottonseed oil. The fact that this discount has been entirely too wide, averaging around 1 cent per pound much of the time, has not been due to the market value differences in the two oils. It has been due more to the fact that since many of the soybean processing plants are relatively new, in most instances they lack sufficient oil storage facilities to permit of an orderly marketing plan. This condition will gradually disappear, as many firms have doubled and tripled their oil storage capacity to permit of a better merchandising plan. But regardless of the correctness of the market-

ing program, soybean oil never can sell for more than the various fats and oils which can and do replace it in our domestic consumption.

A small percentage of our total soybean oil, probably not to exceed 15 or 20 per cent, is utilized in a field commonly referred to as the industrial or technical field. This field includes soybean oil that is used in the production of duco finishing for automobiles, blends with other oils in the production of paint and varnishes, absorption in the waterproof line of goods, such as oilcloth, linoleum, and such other minor uses as printers' ink and core binders. Here soybean oil meets a great variety of competition. In the paint and varnish utilization it must compete with linseed oil, a competition that is made more difficult by the need of blending other quick-drying oils with soybean oil for best results. The fact that linseed oil has been the standard paint vehicle for generations also tends to add a psychological barrier to expansion in this field. In most of the other industrial fields, soybean oil meets a host of competitive oils, many of which, unfortunately, are dumped into the United States by foreign countries profiting under so-called reciprocal trade agreements.

Soybeans to Replace Restricted Cash Crops: All of us are vitally concerned in the future prospect of soybeans. With the government control program definitely limiting or restricting the acreages of certain major crops, i.e., corn, wheat and cotton, growers in all of these sections are eagerly searching for some replacement crop that will carry the same classification at least as the crops being replaced; namely, a cash crop. We hear much of parity prices, parity this and parity that, but personally I do not feel that parity figures have any particular value today.

The price of corn or wheat right now has little relationship to the price ten or twenty years ago, for the reason that today's corn crop is on a restricted, controlled acreage. Accordingly, farm conditions today compared to ten or twenty years ago, must be viewed in terms of total farm income. If the cash crops that the farmer normally produces are reduced, then it is only natural that he will look for another cash crop to put in their places so that his total farm income may be maintained.

The indicated crop possibilities for 1939 are being commonly placed around 75 million bushels. I would not be at all surprised if the crop exceeds that figure. The problem then becomes, can we continue to expand the soybean acreage in the United States without disastrous results? I believe the answer is very definitely, YES.

Influence of Foreign Imports of Oils: During the past three years, and in fact for many years before, more foreign oils were imported into the United States than moved into any other country. For years we have been the best market for almost every foreign produced oil. Today we hear opinions and arguments advanced that the lard surplus is causing disastrous prices on cottonseed oil and soybean oil. Those who would so argue are ill-advised. In the past year almost half a billion pounds of coconut oil were imported into the United States from the Philippines and used in direct competition with lard. At times this oil has sold as low as 2.2 cents per pound Pacific Coast ports. In the past year warehouse stocks of vegetable fats and oils have been the highest in our country's history. Yet some will argue that two or three hundred million pounds of lard is causing all the present trouble. Our average imports of foreign fats and oils for the last three or four years has been approximately 1¼ billion pounds annually. Those figures tell the entire story of the present low prices of fats and oils and the cause of a surplus of lard. Had these imports been re-



E. F. (Soybean) Johnson, St. Louis, Mo.

stricted by higher duties, then our domestically produced lard would have been able to replace many of these foreign oils and there would be no surplus today.

If the soybean grower wishes to continue his present production profitably, then he must become vitally interested in a program that will restrict the importations of foreign oils.

Each one cent per pound increase or decrease in the price of soybean oil will affect the price of soybeans approximately $8\frac{1}{2}$ cents per bushel. If, for example, foreign oils today were obliged to pay a 5 cent processing tax instead of 3 cents, we would have every reason to feel that soybean oil instead of selling at 4 cents a pound would probably sell at around 6 cents a pound. This would mean that the grower would receive 16 or 17 cents a bushel more for his soybeans.

Industrial Uses of Soybean Oilmeal: Many will argue that this is incorrect and that reducing the competition of foreign oils with our domestic oils will have little effect, as we still must find a market for the soybean oilmeal produced. While it is true that the utilization of soybean oilmeal industrially has been insignificant, that has been due largely to three conditions. First, the need of additional laboratory investigation of some of the uses; second, the adaptation of commercial machines that would permit of mass production; and third, the need of a price relationship with other competitive compounds favorable to soybean oilmeal. It requires time to convert the public to the utilization of a new commodity.

Utilization of soybean meal in the production of highest type glues is a recent discovery. Yet, in the past three years this one industrial use has become firmly entrenched and is now using the meal from some 2 to 3 million bushels of soybeans. Laboratory work is, I understand, nearing completion on the utilization of soybean oilmeal or the protein therefrom in the production of paper sizing. Less than a month ago one of our prominent automobile manufacturers displayed an automobile with the entire body made from soybean plastics. We recently learned through semi-official sources that plants are under construction for the casting in one piece of the fuselage and wings of airplanes. The material that is intended to be used will carry a sizeable percentage of soybean protein.

The significant fact is that soybean oilmeal selling at its present level constitutes a very different industrial possibility than soybean oilmeal selling at around \$25.00 or \$30.00 per ton.

Today's prices of soybean oilmeals place plastics produced therefrom on a cheaper basis

than wood. Now it is true that a very small tonnage of soybean oilmeal will make all of the distributor heads and other gadgets at present in use on automobiles and all kinds of electrical equipment. However, let us assume that shortly doors for all kinds of homes may be produced from soybean plastics. This is a definite possibility, since such a building item is produced in what we term mass production in centralized areas.

A significant thought I wish to leave with you, however, is that by restricting the flow of foreign fats and oils to this country, we could increase the domestic consumption of soybean oil approximately 1 billion pounds, or $2\frac{1}{2}$ times the total production of soybean oil this past year. With the protection from foreign oils, a higher level of prices could be maintained, even with soybean oilmeal continuing to sell at its present levels. Under such conditions our soybean acreage might be expanded to twice this year's production.

The Bean Weevil

Infested beans have caused much trouble to those who keep them in storage. Often the insects leave the germ to be eaten last or avoid it altogether. Consequently, while the weevils are common and destructive germination tests of seeds that have been treated as soon as the injury was discovered usually make a good showing.

The seedlings, however, may be backward because the nourishment has been lost.

The bean weevil causes a great amount of damage to beans in storage, according to Harold H. Shepard of the Minnesota Agricultural Experiment Station who says:

The adults vary greatly in size, averaging about one-eighth of an inch in length. The wing covers are mottled with light and dark spots. The larvae are legless grubs.

The eggs may be laid in the pod in the field. The larvae burrow into the beans and eat out a cavity. When mature they form a cell near the surface and transform within it. A small round spot can be seen on the bean after this cell has been formed. When the adult is ready to emerge it removes a portion of the outer coat of the bean, leaving a circular opening through which it emerges.

If the temperature is high the life cycle may be only about thirty days. The fact that the pest continues to breed while the beans are in storage, makes it serious. If the temperature is high enough, the adults will

emerge thruout the winter and lay their eggs loosely among the dry beans. Thus they multiply thruout the year and if not checked will destroy the beans entirely. Several related weevils which infest beans and cowpeas in the South attach their eggs to the surface of the bean.

If the beans are infested, the weevils should be killed at once. This may be done by fumigating with a gas or by heating the beans.

If the beans are stored over winter where the temperature is less than 40 degrees F., weevils will not develop even if they are present. If beans or peas are stored in heavy cotton sacks rather than loosely woven bags, weevils can not spread from infested lots to uninfested ones.

Soybean Acreage Largest in History of Crop

By K. E. BEESON, Extension Agronomist, Purdue University

Soybeans have replaced oats in 1939 as third ranking grain crop in acreage in Indiana for the first time in history, and are crowding wheat for second place in both acreage and value, according to crop estimate figures recently released which place the state's soybean acreage at 1,201,000, the oats acreage at 1,176,000 and the wheat acreage at 1,553,000. In fact, the soybean acreage amounts to 29 per cent of the acreage devoted to corn.

The phenomenal increase in the acreage of soybeans in the last ten years during which the acreage has increased fourfold, has been made possible by establishment of soybean processing plants located chiefly in the Corn Belt. The Agricultural Conservation Program the last two or three years also has given impetus to the campaign for more soybeans and legumes of all kinds.

From a few scattered plants in 1929, with a capacity of several million bushels, the number has grown to approximately seventy-five, with a crushing capacity more than equal to the 57,000,000 bushel crop of 1938. Six processing plants are located in Indiana with extensive processing and storing capacities. At least two of the largest plants are increasing their facilities this year, in anticipation of the most extensive processing of soybeans in the history of the crop.

While a part of the 1938 crop was exported, the use made of the soybean oil meal for livestock feed, and of soybean oil for human food largely accounted for commercial utilization of the crop. Most of the oil produced in recent years has been used in shortenings, butter substitutes, and other edible products to replace imported and other domestic oils. Less than ten per cent of the annual production is used in the manufacture of paint and varnish, altho this is an important potential field for developing the use of soybean oil.

The most phenomenal increase in the use of soybean oil has been in the production of margarine. Use in this industry in the month of May, 1939, was 171 per cent greater than in the same month of 1938, altho the consumption of margarine was less in the United States. This production in one month would absorb all the oil from the crop in Indiana's most extensive soybean producing county.

While the price of soybeans is determined by the commercial demand for the meal and oil, and the relative price of competing products as well as export demand, and is therefore difficult to forecast, it is worth noting that rarely has the price of soybeans per bushel dropped below the price of wheat in the ten year period during which commercial utilization has determined the price of soybeans. The production per acre compares favorably with the yield of wheat, and since the plant is a legume the soil is also left slightly higher in nitrogen if the crop is harvested with combines.

The National Safety Congress will be held at Atlantic City, N. J., Oct. 16 to 20.



Beans Infested with Bean Weevil, *Acanthoscelides obtectus*. From Bull. 340, Minn. Agri. Exp. Station

Features of Soybean Grade Determinations

So many new acres have been switched to soybeans in the last year, as soybean production and the soybean industry continued its spread east and west, that many grain dealers whose territories have heretofore yielded only wheat, corn, or oats, will be faced with the problem of handling soybeans for the first time this year.

No changes have occurred in the official United States standards for soybeans since the revised standards were put into effect Sept. 3, 1935. These standards are applied by federal soybean inspectors licensed and supervised by the Hay, Feed & Seed Division of the U. S. Department of Agriculture. Copies can be obtained from this Division at any of its offices upon request.

Soybean processors consider U. S. No. 2 the basic grade for evaluating their purchases of soybeans. Grades No. 1 to No. 4, inclusive, cover the quality range found in commercial lots of this commodity. Sample grade is the designation for beans of distinctly poor quality, or beans that for some reason fail to meet the standards of any of the numbered grades.

CONDITION, general appearance, test weight, moisture, splits, damage, and foreign material are the principal factors in grading soybeans. Mixture of colors is not a grading factor, except in so far as the standards cover allowance of beans of "other classes." This factor does not enter into the grading of mixed soybeans, which are classified as "mixed."

UNIFORMITY of size in grading soybeans is considered only in connection with the No. 1 grade, which requires that the beans shall be "well screened." No definite screen standards are set for this provision. Normal knowledge of the sizes of beans of the various classes is sufficient to establish this factor upon superficial examination.

THE TEST WEIGHT per bushel of soybeans is readily determined with the customary testing kettle in use by all country grain dealers. Altho the minimum test weight per bushel is set at 56 pounds for top grade beans, the standard buying weight is 60 pounds per bushel, the same as for wheat, and discounts are applied for beans of lower test weight. The test weight per bushel of soybeans indicates their plumpness and maturity, which reflects their commercial value.

Soybean processors work on comparatively narrow margins between the price they pay for beans and the prices they get for meal and oil, and the yield of meal and oil from a bushel of soybeans is important to their profit and loss statements. It is usually true that the more plump and mature the bean, the higher is its yield of oil, a major consideration to the processor.

COMMERCIAL CONSIDERATION similarly enters into moisture tolerance in soybeans from both the keeping and the processing points of view.

Moisture is lost in processing and if weight concealed in moisture is paid for when the beans are purchased, the shrinkage in weight when the beans are converted into meal and oil becomes a drain on the processor's income.

No one has determined officially the maximum moisture content at which beans may be stored safely. Much depends on the storage conditions. The best available data indicate that beans meeting the standards of the No. 2 grade, and containing not more than 15% moisture, may be stored safely in bulk or in sacks. The No. 3 grade is allowed 16½% moisture, the No. 4 grade 18%, and beans containing so

much moisture must be watched carefully in storage.

THE BASIC method for determining the moisture content of soybeans is the water oven described in Service and Regulatory Announcements No. 147 of the Bureau of Agricultural Economics of the U. S. D. A. But the standards allow determination of the moisture in commercial soybeans with any approved commercial device that gives equivalent results. Moisture tests in most inspection and grading laboratories are made with the Tag-Heppens stall electric moisture meter, and all three of the leading electric moisture meters have conversion charts covering soybeans.

In making a moisture test on soybeans with the Brown-Duvel moisture tester (which is still in common use among country grain dealers, tho gradually being displaced with modern electric testers) use 100 grams of soybeans and 150 cc. of oil for the test, and shut off the heating element at 170 degrees. Preparation of the tester for the test, and the amounts of beans and oil are the same as for wheat, corn, oats, rye, or other grains. Only variant is the temperature at which the heat is shut off.

SPLITS and broken soybeans do not seriously affect the commercial value of beans purchased by industries. Some think that there is oxidation of the oil on the opened surfaces of splits and broken beans, but the U. S. standards allow rather generous amounts of splits in the various grades. Even the basic grade, No. 2, is allowed 10% splits.

MOST DAMAGE to soybeans is caused by frost, weather, excessive moisture, or heating in storage. The kind of damage is of less importance in grading soybeans, than the effect of the damage on the commercial value of the beans. Thus any beans in a sample that are distinctly damaged from any cause affecting the oil and meal yield must be classified as damaged.

The personal element enters into picking of samples for damage. Experience is a great teacher in establishing this important grading factor, tho type samples are available which are a great help. Grade allowances for damage are narrow.

FOREIGN MATERIAL in the grading include all shriveled soybeans, pieces of soybeans, and material other than soybeans which will pass thru a metal sieve with round-hole perforations ten sixty-fourths inch in diameter. Efficiently operated combines and threshing machines may turn out beans sufficiently clean to meet the standards for No. 2, which allow 2% foreign material. Most foreign material is easily removed from soybeans with standard cleaners commonly found in country grain elevators. Grain dealers receiving dirty beans can improve their quality by running them over an inclined screen, with one-eighth inch, or ten sixty-fourth inch mesh. Hardware cloth has just about the right size mesh, and is carried in stock by most hardware and building supply merchants.

A SINGLE FACTOR is sufficient to throw soybeans of one grade into a lower grade. Grain dealers who buy soybeans strictly on grade can take advantage of this by judicious mixing, or by screening, cooling, or otherwise handling the beans after purchase to improve the grade. An elevator that has several bins in which different grades and qualities of beans can be kept has an advantage in its ability to improve qualities with minimum handling. While certificates issued by inspectors show the grading factors, it continues generally true that the higher the grade the higher the price.

Increasing Popularity of Soybean Oil Meal

By Lyman Peck, Ft. Wayne, Ind., of Soybean Nutritional Research Council

During the past ten years the annual production of soybean oil meal in the United States has increased from about 21,000 tons in 1928 to approximately 1,000,000 tons last year. One must admit that this is a phenomenal growth, and a brief study of this development shows that certain basic factors are responsible for it. The first is an increasing realization on the part of live stock raisers that proteins are needed to balance the corn, oats, and barley which constitute the base of the rations used for growing and fattening live stock and for the production of milk and eggs. This increasing realization of the necessity for protein in balanced rations indicates that the early teachings of Henry and Morrison and others were not in vain, and that subsequent research and experience has proved the soundness of their early work.

"What protein sources are most economical?" The answers to that question are contained in the mass of experimental data on the feeding of soybean oil meal that has come from our Agricultural Experiment Stations and Colleges during the past twenty years. As feeders become better educated they want facts, and in the main they look to the Agricultural Colleges and Experiment Stations for these facts. Experience eventually teaches them, as it does any business man, that facts are the only firm foundation for any successful business. Propaganda not based upon facts is only temporary and usually costly in the end to those who are guided by it.

Experimental data in general has shown that properly processed soybean oil meal is equal or superior to other vegetable proteins for feeding dairy cows, beef cattle, swine, sheep and poultry. The biological value of the protein as determined by feeding tests with lambs, being higher than either linseed or corn gluten meal.

Soybean oil meal has become a standard ingredient in the rations of dairy cows, particularly in the territory east of the Missouri River. Dairymen have found it to be an efficient and economical source of protein for producing milk.

For fattening beef cattle soybean meal is making a rapid progress. One prominent authority recently stated, "I know of no ration that is not better by using palatable soybean oil meal in place of soybeans. *** We



Lyman Peck, Fort Wayne, Ind.

Soybeans Move Westward

are hopeful that conditions will continue to encourage the soybean crop and thus furnish soybean oil meal in abundance, because either alone or in combination with other proteins it is an excellent feed and its source is well located for corn belt feed lots."

For swine the data reveals the fact that soybean oil meal does not cause soft pork which is in contrast to the results obtained from feeding soybeans. When properly supplemented with minerals soybean oil meal may be used to replace a large per cent of the animal protein in the ration with excellent results both as to rapidity of gain and lower cost of producing pork.

Sheep feeders are rapidly learning the value of soybean oil meal as a supplement to grain for fattening lambs. Sheep breeders are beginning to realize the importance of more protein in the rations of pregnant ewes; a pregnant ewe requiring slightly more protein per hundred pounds of body weight than a dairy cow producing fifty pounds of 4 per cent milk daily. As compared to beef cows the body weight of offspring per hundred pounds of the dam's bodyweight is twice as great in the case of the ewe and the period of gestation is only about half as long. Therefore the pregnant ewe requires about four times as much protein per hundred pounds of body weight as a beef cow.

For poultry feeding a summary of the experimental data for the past 20 years almost without exception indicates that raw soybeans either whole or ground, are not a suitable poultry feed. On the contrary, the data shows that properly processed soybean oil meal when supplemented with essential minerals and vitamins (particularly vitamin G) may be advantageously used to replace a large part of the animal protein in the rations of growing chicks, laying hens, and turkeys.

While the early research with soybean oil meal established it as a valuable protein concentrate, there seemed to be considerable variation in the results obtained. This indicated a possible variation in the nutritive value of different lots of meal.

In 1936 Hayward, Steenbock, and Bohstedt published their findings on the effect of heat as used in the extraction of soybean oil, upon the nutritive value of the protein of soybean oil meal. This work marked a milestone in the progress of soybean oil meal, because it revealed the importance of proper heat control during processing. When the heat applied was too low the feeding value of the meal produced was inferior to that produced when more heat was applied. Up to this time very little was known about the optimum heat and the effect of heat upon the nutritive value of the meal. This discovery also explained the variation in feeding value of soybean oil meals that had been experienced prior to this time.

As soon as these facts were established processors began to exercise more care in processing with the result that the nutritive value of soybean oil meals as a whole was greatly increased.

Much has been written and said regarding the merits of different methods of processing soybeans, but the fact remains that the amount of heat applied and the length of time it is applied has more influence upon the nutritional value of the meal than the particular method of processing used.

A reduction from 25c to 12½ cents per bushel in the duty on corn imported from Argentina is included in the trade treaty being negotiated by Sec'y of State Cordell Hull.

Thru Herman H. Trapp, past president of the American Operative Millers' Ass'n, Buffalo, has extended an invitation to the association to hold its 1940 convention in the Queen City.—G.E.T.

When soybeans first began to edge oats out of second place in grain crop production in central Illinois, many spirited speculations developed in discussions between grain dealers as to whether soybean production would continue to increase.

A freight rate structure naturally set up to move farm products eastward, combined with a strong demand for soybean meal as a feed concentrate in the milk sheds of big eastern industrial centers, led to a natural quick growth of soybean production in Indiana, and Ohio. Soybean processors, observing the trend in production and markets, led the way by establishing processing plants and increasing capacities of these plants as increases in acreage of soybeans gave assurance of continuing supplies. Increases in production of soybeans quickly led to increases in the number as well as the capacities of soybean processing plants.

Due to a freight rate structure and milling-in-transit privileges that place a premium on usable billing, most successful soybean processing plants are located close to the point of production for soybeans. Soybean meal can be shipped on billing originating with the beans. Point of origin for the oil, however, is the processing plant. Since oil constitutes 17% to 19% of the soybean, this means loss of 17% to 19% of the billing originating on whole soybeans in the country. It means freight bills from 10% to 15% higher per ton of meal for the plant that has to draw its raw beans over long distances by rail, compared with plants close to the point of origin for the beans. This extra cost in freight places the plant far from soybean growing centers at a competitive disadvantage in relation to processing plants located in the soybean growing districts.

Expansion of the soybean acreage in Iowa, Nebraska, and Missouri, coupled with a new and increased demand for mixed feeds, and for feed concentrates in western states, is now lead-

ing to new expansions in soybean producing capacity in western parts of the corn belt. Rapid expansion of the soybean industry has swung from the eastward trend to a westward movement.

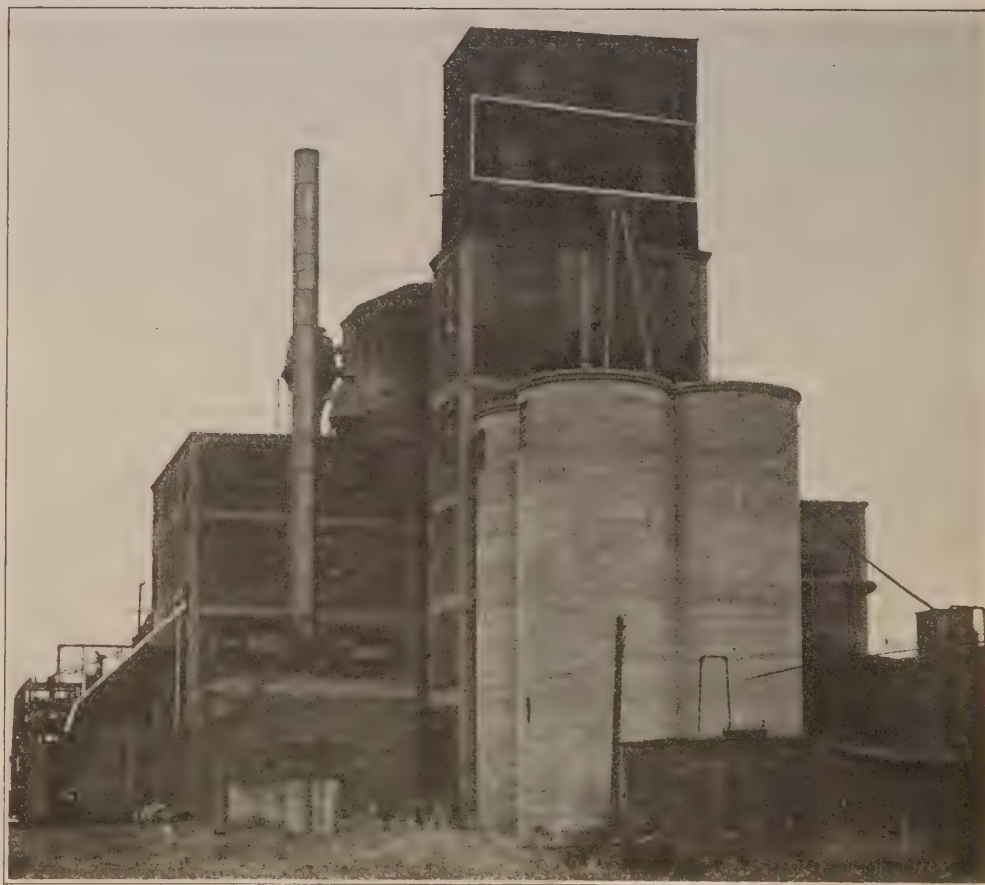
At Des Moines, Ia., Swift & Co. is finishing a new plant to compete with Spencer-Kellogg & Sons, Inc., for Iowa beans, and to give the capitol of the Hawkeye state two large processing plants. Expansion programs are reported under way for soybean processing plants located at Waterloo, Ia., Quimby, Ia., and Omaha, Neb.

Expansion of the soybean industry is moving southwestward as well as westward. When H. L. Dannen of the Dannen Grain & Milling Co. took over the old Grain Belt feed mill at St. Joseph, Mo., last fall, his purpose in acquiring a plant that had been closed for some time was to create a soybean processing plant.

The Dannen plant was started on a small scale. In it was installed a French screw press, a Sperry oil filter, a Nordyke & Marmon rotary drier for grits, a 2-pair-high roller mill, a hammer mill driven by a 20 h.p. motor, a Richardson 100 lb. sacking scale, and a Vibrox packer. Operation of the plant was begun with local soybeans and on soybeans shipped in from Iowa and Illinois. It proved so successful that immediate steps were taken to perfect an expansion program.

Installation of two more French screw presses has been under way during the summer, and carpenters and millwrights are busy outside and inside the plant on a remodeling program that will increase production efficiency, and that will bring total soybean storage capacity of the plant, now standing at 60,000 bus., to 350,000 bus. Eventually the storage capacity will be increased to 600,000 bus.

Hardly more than 500 bus. of local soybeans were available at St. Joseph last fall. With the expansion of the Dannen interests creating a



Feed Plant at St. Joseph, Mo., being Remodeled for Soybean Processing by Dannen Grain & Milling Co.

market, farmers of the St. Joseph area bought more than 10,000 bus. of soybeans for seed last spring. Today's acreage is expected to make possibly 200,000 bus. of local soybeans available to help keep the plant busy this fall.

Even with the increased processing capacity available to press local soybeans, and beans purchased at other soybean markets, the St. Joseph plant is not expected to be able to keep up with the soybean meal requirements of the Dannen feed interests. "We'll still have to buy some soybean meal outside," says Dwight L. Dannen, son of the head of the company, "to fill the demand for soybean meal at our retail feed outlets."

The successful production and commercial processing of soybeans has reached the Missouri river in its march westward. With new and near markets available, farmers in the corn and oats sections of Kansas and Nebraska are turning to soybeans as a new cash crop.

Soybean Hits New Top as Cash Crop

By LAMAR KISHLAR

He was a grizzled old fellow with horny hands that testified to years of closeness to the soil. He was talking to a group of fellow farmers about his bumper soybean crop.

"You know," he said, "I figure I make three profits on my soybeans. I make a profit when I sell them as a cash crop. I make a second profit when I feed soybean oil meal to hogs, dairy cows and chickens. Then I figure there may be a little profit to my soil in growing soybeans."

That there is profit in growing soybeans is best confirmed by the steady far flung expansion of acreage, and in the fact that the 1939 harvest produced America's largest crop of soybeans. It sent new dollars jingling into the pockets of many farmers who never before touched this crop. In many districts where oats had been grown at ruinously low levels large number of farmers had turned their soil to soybeans at commendably high prices compared with grain and other farm crops.

Production figures in the four leading states of Illinois, Iowa, Indiana and Ohio were surprisingly large. Bear in mind this spectacular new cash crop is but sixteen years old. In 1922 only 99,000 bushels of beans were crushed. As recently as 1928-29, the industry produced only 21,000 tons of soybean oil meal. Production of meal from the current crop may exceed 920,000 tons.

The soybean, native of eastern Asia, is one of the oldest crops known to man, being extensively grown long before written history began, some say 25,000 years ago. First record of the plant seems to be in a Chinese book on Materia Medica, called "Pen Ts'ao Kong Mu," written by the Emperor Shen-nung in 2838 B. C.

Even the name is cloaked in mystery. To the early Chinese, one word, "Shi" meant the salted bean; another word "Yu" designated a condiment. It was simple then to combine the two words into "Shi-Yu" and apply the term to the plant as well as to the raw bean.

The soybean was long in finding the western world. Introduced into France as early as 1740 and in England in 1790, it was not until 1804 that the first soybean came to America, and then as a curiosity cultivated only in botanical gardens. In the latter part of the nineteenth century its commercial importance began to be suspected.

A hundred years after the first bean reached America's shores Dr. C. R. Ball of the U. S. Department of Agriculture in 1907 described twenty-three varieties of soybeans, which represented the only varieties then known in America.

The world war stimulated great interest in soybean oil. In 1918 336 million pounds of the oil were imported from the Orient.

By the time the world war ended, the U. S. Department of Agriculture had imported 629

varieties from the Orient, a mere beginning. In all, more than 7,000 seed samples have been collected.

In about 1910 an oil mill on the Pacific Coast first used soybeans for oil and meal in the United States, importing Manchurian beans. War time shortage of fats and oils brought in quantities of soybean oil of poor quality from crude equipment, sometimes in kerosene cans improperly cleaned, and thus delayed general acceptance of soybean oil for edible purposes. Today more than 80 per cent of the oil is thus used.

Production of soybean oil from domestic seed was started in a small way in North Carolina in 1916. The first oil was produced in a cotton oil mill in the off season, using the regular cotton oil pressing equipment. In 1920, soybean oil was produced in a small flaxseed crushing plant at Chicago Heights, Ill., using both expeller and hydraulic equipment. When the information leaked out that a soybean oil mill was expecting to crush beans in Illinois, so much interest was stimulated that all the local beans were sold for seed and it was necessary to ship the first cars of beans from North Carolina from which the first tank of soybean oil was made.

In 1922, oil was made by a corn milling company in Decatur, Ill. At first only one expeller was used, but two more were installed some time afterwards and about 90,000 bushels of beans crushed that first year.

Products that can be made from soybeans are innumerable. In the first operation, crude soybean oil is removed from the soybean oil meal. By farther processing, the oil can be made into salad oil, shortening, oleomargarine, and even lipstick. The oil is used also in the manufacture of paint, printing ink, linoleum, oil cloth, foundry cores, soap, and rubber substitutes. The lecithin, and similar materials, which are removed from the crude oil by a refining process, are said to be useful in fifty industries.

More than 95 per cent, possibly as much as 98 per cent in some years, of the soybean oil meal produced in the United States is used in feeds for livestock, pet stock and poultry. The small remaining amount is used for other purposes—a wide variety of adhesives, used in the ply-wood industries, wall paper sizing, plastics, and flakes useful in brewing. Some of the edible varieties of soybeans have been canned experimentally very successfully.

Soybean oil meal has been widely used for fertilizer in Asiatic countries, where its high fertilizing value has been recognized for centuries. In the United States, soybean oil meal has been used for a number of years in increasing quantities as fertilizers for lawn and golf greens, as well as for all kinds of flowers and shrubs.

Meeting American Soybean Ass'n

A two-day conference of processors, growers and distributors of soybeans was held Sept. 11 and 12 at the University of Wisconsin, Madison.

Prof. J. G. Halpin delivered an address on "Soybean Meal for Growing Chicks," in which he declared soybeans contained the best of all proteins for poultry rations.

Lyman Peck, Et. Wayne, Ind., spoke on "The Growing Popularity of Soybean Oil Meal."

Floyd Duffee of Madison advocated mixing molasses with the cut feed.

The use of the combine in harvesting the crop was practically demonstrated in field visits.

Soybeans were featured at the annual banquet at the Loraine Hotel, where the visitors were welcomed by Dean C. L. Christensen of the Wisconsin College of Agriculture.

The next fall meeting will be held at Dearborn, Mich.

Last year's officers were re-elected: pres., G. C. McIlroy, Irwin, O.; vice pres., J. W. Hartz, Stuttgart, Ark.; sec'y-treas., J. B. Edmondson, Clayton, Ind.; directors, John T. Smith, Tolono, Ill., and Geo. Strayer, Hudson, Ia.

Soybean Production Going Up

Soybeans have shown an 18.4 per cent jump in seeded acreage this year over last, according to the Crop Reporting Board of the U. S. Department of Agriculture. Last spring 8,119,000 acres were seeded, compared with 6,858,000 acres in 1938, and 4,246,000 acres for the 10 year average from 1928 to 1937, inclusive.

The Sept. 1 government report gave soybeans a condition rating of 90%, 3% up from last year's 87% on the same date, 15% over the 10 year average Sept. 1 condition of 75%. Last year soybeans showed an improvement in their condition between Aug. 1 and harvest that resulted in an average yield of 19.9 bus. per acre on the harvested acres, and produced a bumper crop of 57,665,000 bus. Normally the condition of soybeans thru the filling stage to harvest shows a decline.

Private estimates on the basis of the seed acreage, place the current soybean crop at above 80,000,000 bus. These estimates, made around Sept. 1, did not consider the September drouth that hurried maturity of corn, and caused a decline in the expected yield of soybeans. Dry as are the fields, soybean experts believe that the final crop outturn hinges upon the weather more than usual. Pounding rains, breaking the drouth, could cause pods to crack, and leave a large part of the new soybean crop laying on the ground in the fields.

Mrs. E. H. Miller, private crop statistician, Shields & Co., points out that the average yield of soybeans per acre has shown a steady increase along with the increases in acreage, because farmers have learned more about cultivating soybeans, and preparing the seed bed for them. Early growers of soybeans broadcast their seed beans in a field, and used a harrow to cover them. Today the top soil is mulched by careful farmers, and usually the beans are drilled in rows so that they may be cultivated during the early part of their growth.

The 10 year average yield per acre of soybeans for the period 1927-36 was 14.2 bus. The 1937 yield was 17.8 bus., the 1938 yield 19.9. This increased yield per acre has been a factor in developing the quick climb in total production of soybeans that has outdistanced the increases in acreage. The 10 year average total crop amounted to only 18,000,000 bus., but the 1937 yield was 45,272,000, and the 1938 yield was 57,665,000.

Condition reports from Ohio, Indiana, Illinois, Iowa and Missouri, the leading corn belt states, have been substantially higher than a year ago. Illinois is the No. 1 soybean producing state, Iowa rates second, Indiana third. Condition reports from some of the states where soybean production is still new, tho rapidly spreading as in Nebraska and Michigan, are lower than a year ago.

The increase in acreage has been fairly general, tho the greatest increases have been recorded in the corn belt and adjacent states.

Authorities believe that the September drouth may cause a marked increase in the use of soybeans for feed. This will have an effect naturally on the soybeans offered for sale, and a part of the increase in production this year is likely to be lost before it reaches commercial channels.

Nevertheless, the indicated crop leaves processors little to worry about. Their plants can be kept busy, unless export demand begins early to drain beans out of the country and forces them to scramble for their supplies of the raw material for making soybean meal and soybean oil.

Some farmers, remembering high wartime prices, may wish to discontinue cooperation in their farm programs in order to expand the acreage of wheat and other crops. I would remind them that the average prices of wheat, corn, hogs and beef were lower a year after the world war started than they were in 1914. —Sec'y of Agriculture Henry A. Wallace.

Grain and Feed Trade News

Reports of new elevators, feed mills, improvements; changes in firms; fires, casualties, accidents and deaths are solicited.

CALIFORNIA

Long Beach, Cal.—Fire damaged the buildings and stock of the Long Beach Milling Co. Sept. 12.

San Fernando, Cal.—The Harry Gilmore Hay & Feed Co. warehouse and offices burned Sept. 10. Spontaneous combustion is reported to have caused the fire.

Orland, Cal.—Everett Rice and Gerald Parlin have formed a partnership in the grain business. The new firm plans to operate a grinding and mixing department for which new equipment has been installed.

San Francisco, Cal.—The tentative schedule of meetings in Southern and Northern California to be held under the auspices of the California Hay, Grain & Feed Dealers Ass'n, with the directors in charge of the gatherings, has been announced as follows: Sept. 28, Santa Barbara, Dist. Chr., Ernie J. Pate; Sept. 29, San Luis Obispo, dinner at Motel Inn, Dist. Chr., Ray D. Pelton; Oct. 6, San Francisco, Director, E. R. Warren; Oct. 9, Santa Cruz, C. A. Gardner; Oct. 10, San Jose, G. S. Leedom, Dist. Chr.; Oct. 11, Hayward; Oct. 12, Petaluma, Dist. Chr., Ed. Durr, and Director, H. C. Hazlett; Oct. 17, Tulare, Director, Dewey B. Wells; Oct. 18, Modesto, Dist. Chr., E. W. Turner, and Director, N. S. West; Oct. 19, Marysville, Dist. Chr., Mat Arnoldy, and V. Pres. W. K. Jansen; Oct. 20, Corning, W. K. Willard and Dan Zumwalt; Oct. 24, Sacramento, Hugh P. Scrutton, Dist. Chr. Meetings recently held in Southern California include the following, with men who acted as chairmen: Sept. 20, Los Angeles, at Central Mfg. Club with Director C. B. Cappa in charge; Sept. 21, California Hotel, 6:30 dinner, Pres. Claypool and Dist. Chr. Don V. Conklin; Sept. 22, San Diego, San Diego Hotel, dinner, Director Ralph Boone; Sept. 25, Santa Ana, dinner at Daniger's Cafe, Dist. Chr. Herbert L. Hill; Sept. 26, North Hollywood, Dist. Chr. Ray Sence and G. G. Steere; Sept. 27, San Gabriel, Director Chester F. Ambler.

CANADA

Fort William, Ont.—Tony Kroski, 58, was injured Sept. 18 when he fell from a box car near Elevator B. He was removed to hospital for treatment.

St. Boniface, Man.—The Soo Line Mills, Ltd., will purchase from the city a site with a 231 ft. frontage, where it will construct a 40,000-bu. grain elevator, it has been announced. Construction will start before winter sets in.

Port Arthur, Ont.—M. McDonald, an employee of the United Grain Growers elevator, was seriously injured Sept. 14 when struck by a moving belt. He was removed to McKellar Hospital, where it was found he had sustained a concussion.

Winnipeg, Man.—Officials of the Harbor Commission at Montreal have announced that until further notice, because of the international situation, no figures will be given out daily to show the quantities of grain received, shipped and in storage in Montreal terminal elevators.

Fort William, Ont.—Major H. J. L. Strange, director of the research department of the Searle Grain Co., Ltd., Winnipeg, was the chief speaker at the regular meeting of the local Chamber of Commerce held in the Royal Edward Hotel Sept. 25. His subject was "Wheat, War and Submarines."

Vancouver, B. C.—A contract has been awarded Carter-Halls-Aldinger Co. by the National Harbor Board for construction of an addition to the Columbia elevator and work has started. The addition will cost approximately \$150,000 and will add 250,000 bus. capacity to the elevator, making a total of 600,000 bus. The annex will be of concrete. Repairs will be made to a timber dock and trestle and additional equipment will be installed in the workhouse.

Winnipeg, Man.—The Grain Exchange issued a ruling effective Sept. 13 and until further notice, that every member buying or selling wheat futures for the account of members or non-members shall require a minimum margin of 20c a bu. to be deposited unless such transactions are for the purpose of hedging purchases or sales of grain or grain products. This is a reduction of 10c a bu. as compared with margin requirements imposed a short time ago when markets were fluctuating widely.

Montreal, Que.—Under the recent terms of agreement announced for standardization of grain elevation charges between the North American Elvtrs., Ltd., at Sorel, and Three Rivers Grain & Elvtr. Co., a Norris enterprise at Three Rivers, privately owned houses, and the two government owned elevators here and at Quebec, each party will retain a certain proportion of the total grain handled, as follows: 13/24ths for the National Harbors Board, 3/24ths for Sorel and 3/24ths for Three Rivers.

Winnipeg, Man.—George S. Mathieson, ass't manager of the Norris Grain Co., Ltd., was elected president of the Winnipeg Grain Exchange at the annual meeting Sept. 13. C. Gordon Smith and Stewart A. Searle were elected vice-presidents; George E. Cathcart, John W. Horn, W. G. Kotchapaw, Douglas Laird, R. W. Milner and K. A. Powell were elected to the council of the exchange for a two-year term; Alex Christie, Henry Gauer, G. W. P. Heffelfinger, William H. Noyes, R. C. Reece and A. C. Reid were elected for one year. With one exception, all directors of the Winnipeg Grain & Produce Clearing Ass'n, Ltd., were re-elected at the annual meeting of the Ass'n held in Winnipeg Sept. 12; C. E. Hunting succeeds W. R. Bawlf. The election of officers will take place later. F. O. Fowler and Thomas Brodie continue as manager and ass't manager, respectively.

COLORADO

Loma, Colo.—The Farmers Grain & Bean Ass'n has had the W. H. Cramer Const. Co. build a new bean cleaning and sacking plant here.

Milliken, Colo.—Thieves forced an entrance to the Milliken Elvtr. the night of Sept. 2. The combination to the safe was broken and the safe damaged considerably, but the contents within the safe were intact, the robbers being unable to get to them. Several bags of beans were the extent of the loot.

ILLINOIS

Yates City, Ill.—A new office building has been added to the Brown Mill.

Brighton, Ill.—J. B. Swan & Son installed a Model L Kelly Duplex Hammer Mill.

Avon, Ill.—A new 20-ton Soweigh Motor Truck Dump Scale has been purchased by Bader & Co.

Fairbury, Ill.—The Anchor Grain Co., managed by C. H. Wilke, is building an addition to its elevator.

Monica, Ill.—The Monica Elvtr. Co. office and large implement building are receiving a new coat of paint.

Carlinville, Ill.—Fire destroyed the elevator of the Carlinville Grain Co. and damaged the mill building on Sept. 18.

Weldon, Ill.—Rallsback Bros. are constructing two concrete bins at their local elevator, to be used for grain storage.

Trenton, Ill.—The Trenton Milling Co. reported a small amount of damage done at its plant by recent high winds.

New Hope (Galatia p. o.), Ill.—Grover Ether-ton's mill was forced to close down temporarily recently due to water shortage.

Bloomington, Ill.—The Baldwin Grain Co.'s elevator is undergoing repairs. The Eikenberry Const. Co. has the contract.

Heyworth, Ill.—The two sealed corn wood storage bins for Hasenwinkle-Scholer Co. have been completed by the Eikenberry Const. Co.

Rossville, Ill.—A new 20-ton Soweigh Motor Truck Scale with direct reading recording beam has been installed by the Heaton Grain Co.

Holder, Ill.—Two steel storage bins for corn storage are being erected here by the Eikenberry Const. Co. for the Baldwin Grain Co.

McCall (Carthage p. o.), Ill.—Shirley Sharp is having his elevator repaired and expects to have it in operation the latter part of September.

LeRoy, Ill.—The new storage bin being constructed by Eikenberry Const. Co. for the Hasenwinkle-Scholer Co. here will be completed by Oct. 1.

Savoy, Ill.—The Savoy Grain Co. is building three grain storage tanks, of concrete, 20 ft. diameter and 70 ft. high, with 50,000 bus. capacity.

Springfield, Ill.—Frank Wiedlocher, Sr., 78, founder and proprietor of Wiedlocher & Sons Milling Co., cereal mill, died Sept. 15 at St. John's Hospital.

Hillsdale, Ill.—The Hillsdale Co-operative Elvtr. Co. is strengthening its bins, repairing legs, driveway, etc. Eikenberry Const. Co. is doing the work.

Assumption, Ill.—The Dunkel Grain Co. on Sept. 20 sold its elevator to the Dunkel Elvtr. Co., R. R. 5, Pana, Ill. E. J. Tripp will manage the plant for the latter company.

Havana, Ill.—William Lyons, assistant to his father, Fred Lyons, Sr., in the management of the Continental Grain Co.'s local elevator, and Miss Wave Shirley were married Sept. 17.

Shirley, Ill.—The Shirley Farmers Elvtr. Co. is repairing its north elevator, strengthening the bins and foundations, getting it ready for sealed corn storage. The Eikenberry Const. Co. is doing the work.

Walnut, Ill.—The 40,000-bu. addition being built to the Atherton Grain Co. elevator by Gerbitz & Parker is being rushed to completion to be ready for the corn movement. The new part is 48x52 ft. and 40 ft. high.

Waynesville, Ill.—The Martin Grain Co. is building an 11,000-bu. addition to its elevator for grain storage and a 20x60 ft. shed for housing lumber. Joseph Martin, proprietor, expects to handle a complete stock of common lumber.

Rantoul, Ill.—The old elevator building west of the Illinois Central tracks is being enlarged and repaired and will be occupied by Henry Flesner, who will move his grain elevator business there when the improvements being made have been completed.

Riverdale Station (Chicago p. o.), Ill.—The cereal unit of the Arcady Farms Milling Co. was destroyed by fire the night of Sept. 7, causing a heavy damage. The fire started in the cooling division of the plant and spread so rapidly that 15 workmen had to flee for their lives.

Sullivan, Ill.—The Sullivan Grain Co. is building two concrete grain bins, 24 ft. in diameter and 60 ft. high, each with a 20,000-bu. capacity. This addition to its elevator increases the company's grain storage capacity to about 200,000 bus. at its four elevators, two of which are located here, another at Allenville and the fourth at Bruce.

Edwardsville, Ill.—The A. & B. Feed & Seed Store has installed a 10,000-gallon steel molasses tank underground to hold over a carload of molasses, and will buy the molasses for its sweet feeds by the carload in the future. The store contemplates building its plant cupola higher to elevate its loading spout, and will install another leg, head drive and motor.

New Holland, Ill.—With a loud crash a wall of the McCreery & McNeil grain elevator collapsed the night of Sept. 16 and 8,000 bus. of corn burst out on the ground. The scattered grain was shoveled into trucks and hauled to box cars.

Quincy, Ill.—Frank M. Sheppard has contracted with the Elkenberry Const. Co. for the building of additional storage bins in connection with his barge loading station and for the installation of a sheller so they may store grain besides loading to barges direct. The work is now being done. The construction company recently completed a barge loading station for the grain firm.

Morton, Ill.—We have taken down our old coal sheds and are erecting six new coal bins with concrete floors, frame upper walls and metal roof. We have also bought a Kewanee coal conveyor. In the near future we plan installation of a one-ton feed mixer. A new and faster elevating leg in the elevator is another improvement that we have slated for the future. —Hauter Grain & Coal Co.

Springfield, Ill.—The Illinois Commerce Commission Sept. 20 continued to Nov. 21 the hearing on the petition of the Brotherhood of Railway Trainmen for an order barring heavy trucks from the state's highways on holidays and week-ends. The request for the continuance was made by the Brotherhood who said an effort was being made to determine whether the Commission has jurisdiction in the case.

Walker, Ill.—The VanGundy Grain Co., Inc. elevator was destroyed by fire the night of Sept. 9. An Illinois Central freight car, loaded with grain and on a siding near the elevator, also burned. The grain office was saved. J. F. VanGundy, owner, stated both the elevator and its stock of wheat, corn and oats, amounting to several thousand dollars, are a total loss. The fire is believed to have started in a cob bin.

Quincy, Ill.—Pete Black and Robert Hood, men who have been in the grain buying and elevator business for the last 30 or 40 years, are building a terminal on the site of the old ferry landing at West Quincy. Until such time as the piles have been driven and the loading platform is completed, a barge will be used as a loading platform. It is expected grain will be barged from the site the latter part of this month.

Chenoa, Ill.—The 60,000-bu., frame, iron-clad, 9-bin storage addition to its local elevator being built by the Chenoa Grain Co., of which J. A. Harrison is manager, will be filled by gravity thru spouts from the elevator head; will be emptied with two drags at the bottom to carry grain to leg boots. The elevator also is being covered with steel. This addition brings the company's total storage to over 110,000 bus. at Chenoa. The company also operates a 45,000-bu. elevator at Ballard, 4 miles south of Chenoa.

CHICAGO NOTES

On and after Sept. 25 the opening on the Board of Trade has been at 9:30 a. m., and the close at 1:15 p. m., except that the close Saturday will be at 12 o'clock (noon).

Recent heavy trading is said to have made possible the payment of one week's pay as a bonus to employees of J. S. Bache & Co., security and commodity brokers.

John H. Elker has become associated with E. J. Havey and will do business under his own name, both receiving and shipping. Mr. Elker has been a member of the Exchange since 1912.

Mr. and Mrs. George Stebbins are celebrating their golden wedding anniversary on Oct. 10, and commemorating the occasion are holding open house for their many friends. Mr. Stebbins is connected with the Cleveland Grain Co.

John G. McCarthy, president, and Fred H. Clutton, sec'y, of the Board of Trade, were in Washington Sept. 15, conferring with officials of the department of agriculture regarding margin requirements on speculative trading in grain futures.

Lester J. Alexander of New York City, Kenneth A. Scott and John G. McCarthy, Jr., son of John G. McCarthy, president of the Board of Trade, were elected to membership in the Board. Memberships in the Board of Trade are selling at \$2,000.

Work has begun on the 200 ft. high work-house of the new Chesapeake & Ohio Railroad elevator at 102nd St. and the Calumet River, and it is expected to have the entire project completed by Jan. 1. The 2,750,000-bu. structure is being built by the John S. Metcalf Co.

Margins required on grain futures trades were reduced Sept. 15 by the directors of the Board of Trade from 18c to 15c on wheat, rye and soybeans, and from 9c to 7c on oats. On corn the margin remains as recently increased, 12c per bushel, except on hedging and spreading transactions.

Members of the Chicago Board of Trade on Sept. 21 approved an amendment to the rule pertaining to commission rates to non-members. The commission rate on odd lot orders received from or transmitted to points outside of the city of Chicago is increased from \$2.50 to \$3.50 per 1,000 bus. (See page 191, Sept. 13 issue of the Journals for Rule.)

INDIANA

Indianapolis, Ind.—Rosenbaum Bros. have been incorporated as general grain elevator operators in Indiana.

Fort Wayne, Ind.—W. D. Holterman installed a No. 2 Kelly Duplex Vertical Feed Mixer, one-ton capacity with motor drive.

Plymouth, Ind.—Marshall County Farm Buro installed a new line of elevator equipment from Kelly Duplex Mill & Mfg. Co.

Ambia, Ind.—A 20-ton 34x10 ft. Soweigh Motor Truck Scale with recording beam has been installed by the Ambia Grain Co.

Roanna, Ind.—The Mayer Grain Co. recently installed a combined sheller and cleaner, bought from the Sidney Grain Machry Co.

Yeoman, Ind.—Harold Young, formerly manager of the elevator at Moran, Ind., will become manager of the W. C. Smock elevator about Oct. 1.—A. E. L.

Wyatt, Ind.—Wyatt Grain Co. recently installed a large elevator with baggers and elevators, motor and V belt drive, purchased from the Sidney Grain Machry Co.

Indiana Harbor, Ind.—The New York Central grain elevator located in the railroad company's yards here has been acquired by Rosenbaum Bros. who will reopen the plant shortly.

Clinton, Ind.—The Cook Grain Co. was enrolled recently as a member of the Indiana Grain Dealers Ass'n. The elevator has been operated by Cottrell Bros. in recent years.

Dubois, Ind.—The Dubois Milling Co. will voluntarily discontinue business and dissolve partnership in the near future. Sale of the mill property was held the morning of Sept. 23.

Geneva, Ind.—The Geneva Milling & Grain Co. has purchased the brick building west of the Geneva Elvtr. Co. building and will use it for feed and seed storage after remodeling has been completed.

Camden, Ind.—The Camden Elvtr. Co. has completed the new addition, 20x36x44 ft. containing six bins, and the new feed warehouse, and now will install standard power wiring.—A. E. L.

Mount Ayre, Ind.—Edward Harris, for many years owner and operator of the Mount Ayre grain elevator, died at his home in Berwyn, Ill., Sept. 14 following a long period of failing health.

Markle, Ind.—Everett Hough and Roy Nicholson have leased and are operating the East elevator at Markle from Douglas Lesh. Mr. Hough has been employed by Mr. Lesh for some time.

Raub, Ind.—The Raub Elvtr. Corp. elevator was endangered by a fire that destroyed an adjacent garage at 2 a. m., Sept. 19. Prompt action by neighboring fire departments called to the scene saved the elevator.

La Fontaine, Ind.—The A. B. Martin Grain Co. has doubled the capacity of its 10,000-bu. cribbed elevator with construction of a frame, rodged, and iron-clad addition on a 20x36 ft. concrete foundation. The 36 ft. high new structure has six bins, with screw conveyors above and below to reach the leg in the elevator.

Friendswood (Camby R.F.D.), Ind.—William S. Jessup, 81, for more than 50 years in the mill and feed business here, died Sept. 19.

Richland, Ind.—Owen Causey, formerly of the Fuhrer Ford Milling Co. of Mt. Vernon, is now operating manager of the Lake Milling Co. The latter company's plant has been reconditioned, going into operation Sept. 18.

Goshen, Ind.—Ernest Smoker, manager of the Elkhart County Farm Buro Co-operative Ass'n arranged a public dedication of the Ass'n's new feed mill Sept. 27. An all day house party was held at the mill which was completed recently.

Wakarusa, Ind.—Thieves broke into the office of Laver Bros. elevator recently and battered off the safe combination to open it, in spite of the fact that on the safe hung a sign on which was printed "This safe is not locked"—and it wasn't.

Van Buren, Ind.—Everett McKicker, for several years manager of the Farmers Co-operative Exchange, died on Sept. 3. He had been an active member of both the Farmers Grain Dealer's Ass'n of Indiana and of the Indiana Grain Dealers Ass'n.

Berne, Ind.—The Central Soya Co., Fort Wayne, has completed erection of 20 large bins here for storing soybeans, increasing to 2,500,000 bus. its total soybean storage capacity. There are 40 bins each 100 ft. high and each with a 50,000-bu. capacity.

Keystone, Ind.—The Hoosier Grain & Supply Co. has installed a Jacobson Hammer Mill purchased from Sidney Grain Machry. Co., and additional electric motors. The new feed grinding unit replaces an attrition mill the company has operated for the last 20 years.

Buckeye (Warren R.F.D.), Ind.—The Farmers Exchange, Inc., has remodeled its elevator. Complete new electric power with seven individual motors has been installed. Also installed were a hammer mill, a one-ton vertical feed mixer, and slated for immediate future is installation of a corn cracker and grader. John Lightfoot, at Warren, is general manager of the company, of which the Buckeye elevator is a branch.

Shelbyville, Ind.—Lowell Ash, owner of the Ash Petroleum Co., has purchased the Indiana Grain Producers Ass'n elevator thru the F.C.A. at Washington, D. C. Mr. Ash has been operating the elevator since Sept. 1. Roy Brandt remains manager of the plant which will serve as the purchasing agency for the Indiana Grain Co-operative Ass'n, and the elevator personnel remains unchanged. This is the last of the elevators formerly owned by the Indiana Grain Producers Ass'n to be sold in the liquidating process.

IOWA

Story City, Ia.—The Williams Grain Co. has given its elevator and feed mill a coat of aluminum paint.

Columbus Junction, Ia.—The storage building of the Weber & Huston Feed Co. was destroyed by fire Sept. 11.

Delmar, Ia.—The Delmar Grain & Feed Co. has repaired its elevator extensively and installed new, modern machinery.

Guthrie Center, Ia.—The Farmers Elvtr. Co. elevator was broken into the night of Sept. 9 and two sacks of alfalfa seed stolen.

Beaver, Ia.—Harry Smith, who was appointed one of three new auditors for the Quaker Oats Co., also will be manager of the Beaver elevator.

Early, Ia.—A 20-ton Soweigh Motor Truck Scale, with concrete deck and a recording beam, has been installed by the Early Farmers Elvtr. Co.

Jolley, Ia.—Leonard W. Pickering, manager of the Farmers Elvtr. Co. elevator, and Miss Dorothy McVay of Rockwell City, were married Sept. 9.

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CHICAGO, ILL.

Des Moines, Ia.—J. C. Lake resigned recently as sec'y of the Des Moines Elvtr. & Grain Co. He had been with the company for 35 years and for 10 years was sec'y and treas.

Bruce (Kanawha p. o.), Ia.—A bin in the E. A. Brown elevator sprung a leak Sept. 6 and about 400 bus. of flax poured out onto the railroad track, most of it being salvaged later.

Aurelia, Ia.—Carl G. Anderson, former manager of the Farmers elevator at Rinard, Ia., was appointed manager of the Farmers Co-op. Co. here. He took active charge on Sept. 1.—Art Torkelson.

Dakota City, Ia.—J. F. Miller & Son have raised the cupola on their elevator, increasing the loading speed, and may raise the elevator roof, increasing the bin capacity and height of main building.—A. G. T.

Blockton, Ia.—The Blockton elevator, purchased recently by Charles Gray, has been repaired and remodeled and new modern equipment has been installed. The elevator was opened for business this month.

Des Moines, Ia.—Don R. Jorgensen has been appointed ass't manager of the Des Moines Elvtr. Co.; J. D. Kent is president. The company operates 10 country elevators and a storage plant, the latter located here.

Sioux City, Ia.—All officers of the Terminal Grain Corporation were re-elected at the annual meeting. They are: Ed Palmer, pres.; Thomas Ashford and George R. Call, vice pres.; Ralph Brubacher, treas.; C. E. McDonald, sec'y.

Primghar, Ia.—Wiley & Grieg have under construction a new addition to their plant. It has nine bins and will increase storage capacity around 40,000 bus. The structure is 30x36 ft. and 51 ft. high. T. E. Ibberson Co. has the contract.—A. G. T.

Clinton, Ia.—Work has started on the construction of a wharf at the site of the Continental Grain Co.'s new elevator and it is expected it will be completed by the latter part of September. Construction of the elevator is progressing rapidly.

Dysart, Ia.—D. K. Hopkins, who managed elevators at Galt and Holland, Ia., in recent years, was appointed manager of the R. V. Leo Grain Co. elevator here, entering on his duties Sept. 11. Senator Leo recently completed construction of his elevator.

Dysart, Ia.—The 20,000-bu. elevator of the Whitney Grain Co., operators of two local elevators, has been remodeled and relicensed for storage of sealed corn. The house has been unused for several years. The firm's other elevator has a 45,000-bu. capacity.

Pocahontas, Ia.—Roy Horton, manager of the Pocahontas Quaker Oats elevator for 14 years, has been promoted to district auditor for the company and has charge of elevators in two tiers of counties beginning with the town of Renwick west to the Nebraska line.

Cylinder, Ia.—Harold Fries, 24, was injured seriously Sept. 20 when he fell 50 ft. while working on the Farmers Elvtr. Co.'s new elevator. He was rushed to hospital where it was found he had suffered a compound fracture of his left arm, severe bruises and possible internal injuries. He was working alone at the time at the top of a bin.

Crystal Lake, Ia.—The Myhr Lumber & Grain Co., successor to the Crystal Farmers Ass'n, held open house the afternoon and evening of Sept. 5 commemorating the elevator's grand opening under the new owners. Doughnuts and coffee were served to approximately 450 persons registering there. Balloons and novelties were given the children and a motion picture furnished entertainment during the evening.

Muscatine, Ia.—The McKee Feed & Grain Co. will build a soybean processing plant and storage buildings on the river front at the site of the old water works building which is being taken down. Circular concrete tanks, fireproof in construction, will be erected this fall, but the contract for the manufacturing plant adjacent to the storage tanks will not be let until next year according to L. R. McKee, president of the company. The new storage tanks will be utilized in conjunction with the present grain elevators of the company located on the Mississippi, permitting grain transfers back and forth between the two places. Grain can be received both by rail and truck at the new buildings.

Conrad, Ia.—Belz & Co. have under construction a new soybean warehouse close to their present elevator. It will be of cribbed construction, contain 20 bins that will hold 2,500 bus. each, or a total capacity of 50,000 bus, and is 120x24 ft., and 30 ft. high.—A. G. T.

Rinard, Ia.—John Kurtz, who formerly was assistant at Polk City Grain Co. at Polk City, Ia., was appointed manager of the local Farmers Elvtr. Co. elevator, succeeding Carl G. Anderson who resigned, and now is in active charge.—Art Torkelson, with Lamson Bros. & Co.

Emmetsburg, Ia.—The 65,000-bu. reinforced concrete elevator of the Quaker Oats Co. has been made leak proof by being sheathed with iron. The work was done by T. E. Ibberson Const. Co. The elevator was an old concrete house, built in a day when concrete construction was less durable than it is today.

Alpha, Ia.—The old Johnson Mill, owned by Charles Overton of Sumner, will resume the manufacture of flour. When the dam which furnished water power for the plant is repaired Mr. Overton may resume the use of water power for operation. A gasoline engine is now furnishing power for the feed grinding unit of the plant, which is in operation. Purchase of a diesel engine is also under consideration.

Irrington, Ia.—Forty-six dollars stolen from the Farmers Co-operative Ass'n elevator office recently as reported in the preceding issue of the Journals, has been returned in full. A salesman who had been left alone in the office for a few minutes, confronted with the charge of taking the money, while denying it, made good the loss. A Fenton elevator which had a visit from the same salesman the same day reported some \$50 missing.

KANSAS

Greensburg, Kan.—The Farmers Grain & Supply Co. elevator buildings were destroyed by fire Aug. 30.

Harper, Kan.—The Arning Grain Co. is installing new grinding and cleaning machinery at its feed plant.

St. Marys, Kan.—T. J. Byrnes, veteran grain dealer, is convalescing following an operation at St. Francis Hospital early in September.

Valley Center, Kan.—The Valley Center Farmers Union Co-operative Mercantile & Elvtr. Co. has installed a new cleaning mill in the I. O. O. F. building. The company will use the building for storage also.

Kinsley, Kan.—The Kinsley Co-operative Grain & Supply Co. has discontinued operation of its Skelley service station and is installing an underground gasoline supply tank at the local elevator to handle here the same stock that was handled at the Skelley station.

Crystal Springs, Kan.—Wolcott & Lincoln is constructing an elevator to take the place of the one that burned last harvest. The new structure is of concrete and wood and will be equipped to elevate grain at the rate of 2,500 bu. per hour. Jim Crow will continue as manager of the new elevator.

Galesburg, Kan.—At a recent meeting of the stockholders of the Farmers Union Co-operative Elvtr., whose elevator was destroyed by fire Aug. 29, no definite decision was arrived at regarding the rebuilding of the plant. It has been stated, however, that other parties will take up the proposition if the Farmers Union decides not to rebuild, and an elevator will be constructed here.

KENTUCKY

Mayfield, Ky.—The Mayfield Milling Co.'s plant was damaged by high winds recently.

Fonthill, Ky.—The Fonthill Milling Co. mill on Sept. 11 was damaged by fire starting on the third floor from an overheated bearing.

La Center, Ky.—Hinkle & Jones have completed their new plant, built to replace the smaller unit that was burned in May. A 6,000-bu. daily capacity corn sheller has been installed which will operate on a 24 hr. basis during harvest.

MARYLAND

Bradshaw, Md.—Jerusalem Mills, recently purchased a ton Sidney Vertical Feed Mixer.

MICHIGAN

Davison, Mich.—The Burroughs-Berry Co. incurred a small loss at its plant from high winds.

Bloomington, Mich.—The Bloomington Milling Co. recently purchased a Sidney Vertical ton Mixer.

Millington, Mich.—The Millington Feed & Coal Co. has installed a new seed grain treater with an average capacity of 150 to 300 bus. per hour.

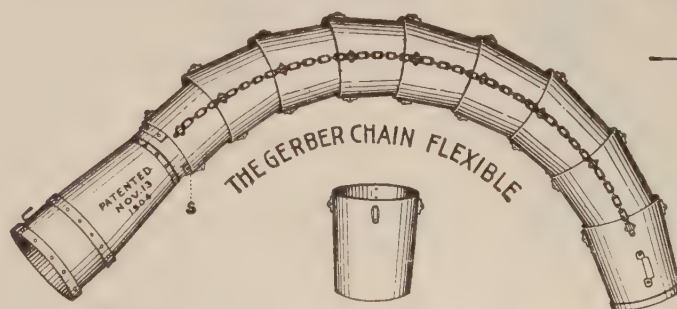
Vickeryville, Mich.—The Rockafellow Grain & Seed Co. elevator had a narrow escape from destruction by fire Sept. 16 when dry husks from unhusked ears of corn being unloaded and run thru the sheller became lodged around the sheller shaft at the discharge spout and were ignited thru friction. Timely discovery and quick action on the part of the employees with fire extinguishers brought the fire under control before much damage resulted. As a direct result of the experience the company has issued a request that all corn be properly husked when offered for shelling.

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Commerce, Mich.—The old Commerce grist mill, built in 1837, closed for the last 10 or 12 years, was destroyed by fire Sept. 6. An option to purchase the mill is said to have been taken some time ago by Henry Ford.

Lapeer, Mich.—Walter Nowak of Hammond, Ind., and Roy Townsend of Flint have purchased a part of Mrs. Mae Metheney's interest in the Lapeer Grain Co. and will become active partners in the company. Mr. Nowak formerly operated the Nowak Milling Co. of Hammond. Mr. Townsend formerly was connected with General Motors.

Romeo, Mich.—Approximately \$200 was stolen from the cash drawer in the office of S. L. Ewell's mill Sept. 6 while Mr. Ewell was busy with a customer outside the mill. It is thought the thief watched his opportunity to slip into the office, found the key, unlocked the drawer and took the money, kept in a small bag, making his get-away without being detected.

Copemish, Mich.—Charles Bigelow, 71, pioneer grain dealer and organizer of the Copemish Elvtr. Co., died Sept. 9. He had been in failing health following a stroke several years ago, but the end came suddenly. Mr. Bigelow operated the Copemish Elvtr. Co. for many years until ill health forced his retirement. Since then the business has been conducted by his son, Charles, and son-in-law, Kenneth Ireland.

Lansing, Mich.—The farm produce storage law of Michigan will go into effect Sept. 29, 1939. Copies of the law and regulations thereunder may be obtained of Miles A. Nelson, director of Bureau of Agricultural Industry, Lansing. Warehousemen storing for others are required to have a license costing \$2 annually. A fee not higher than 25c per warehouse receipt shall be collected to meet the cost of maintaining a warehouse inspection service.

MINNESOTA

Delhi, Minn.—The Farmers Elevator is being repaired.

Raymond, Minn.—The Monarch Elvtr. Co. is building an addition to its elevator.

Dennison, Minn.—The Dennison Co-operative Elvtr. Co. has installed a new 20-ton Soweigh Scale.

Geneva, Minn.—John Hovic of Clarks Grove purchased the local feed mill owned by Mrs. Hans Benson.

Barnesville, Minn.—The Farmers Elvtr. Co. is installing a Howell Pneumatic Grain Booster with 7½ h.p. motor.

Burr, Minn.—National Atlas Elvtrs. will erect a 25,000-bu. annex to the local elevator, to be used for corn storage.

Marshall, Minn.—National Atlas Elvtrs. is planning to build an annex at its local elevator, to be used for corn storage.

Worthington, Minn.—B. P. St. John & Son installed a No. 56¼-D Kelly Duplex Corn Cutter & Grader with motor drive.

London, Minn.—The Farmers elevator has been purchased by Victor Carroll. Mr. Carroll formerly has been employed at the Speltz elevator.

Hallock, Minn.—Frederick M. McKenzie, 75, active manager of the Hallock Farmers Elvtr. for the last 25 years, died Sept. 12 in the Kittson Memorial Hospital.

Annandale, Minn.—The Farmers Co-op. Elvtr. Co. is equipping its new feed plant with a 24-inch attrition grinder with a pair of 25 h.p. motors. R. R. Howell Co. is supplying the mill and accessories.

Crookston, Minn.—The new Farmers Co-operative Elvtr. was threatened by fire the morning of Aug. 28 when an overheated motor fired a belt on the elevating equipment. Damage was confined to the belt and motor.

Montevideo, Minn.—The J. H. Lee elevator has been sold to the Benson-Quinn Co. of Minneapolis who will continue to operate the house under the Lee name with Ray Swanson, formerly of Worthington, as manager.

Wadena, Minn.—H. E. Kiger Co. of Alexandria has purchased the Pillsbury Distributing Warehouse. C. F. Hansen will remain as manager until Oct. 1 when he expects to be assigned a new post for the Pillsbury company.

Stephen, Minn.—Anderson Bros. have been awarded the contract for construction of two concrete storage bins for the Stephen Farmers Co-operative Elvtr. Co. The bins will increase the capacity of the plant 16,000 bus. to a total of 61,000 bus.

Lamberton, Minn.—Work was started recently on remodeling the large coal storage plant of the Farmers Elvtr. Co. into a storage elevator for grains. The elevator will have a capacity of 35,000 bus. and the remodeling is estimated to cost about \$2,500.

Redwood Falls, Minn.—The old wooden siding is being taken off the Redwood Falls Farmers elevator here and the structure will be covered with galvanized sheet metal. The work is being done by the Hogenson Const. Co. George Paton is manager of the elevator.

Duluth, Minn.—Corporation membership in the Duluth Board of Trade has been granted to the Stratton Grain Co., Milwaukee, Wis., and upon request, that of the McDonald & Wyman Co., Minneapolis, rescinded.—F. G. C.

Duluth, Minn.—Demand for screenings keeps up strong and an active out movement continues for both domestic and Canadian supplies. Bulk of the car shipping is going to Minneapolis, with scattering lots sent to other southern state points for feeding interests.—F. G. C.

Minneapolis, Minn.—Effective Monday, Sept. 25, the trading hours of the Chamber of Commerce of Minneapolis will revert from daylight saving schedule to the standard time schedule with the market opening at 9:30 a.m. and closing at 1:15 p.m., except on Saturdays when the close will be at 12:00 noon.

Pipestone, Minn.—The old elevator on North Hiawatha Ave., formerly owned by the Pipestone Farmers Elvtr. Co., and which was taken over by the federal government some time ago, has been leased to the Monarch Elvtr. Co., for which concern H. L. Moore is the local agent. The elevator is being repaired and will be used for the storage of government corn.

Milan, Minn.—J. G. Halvorson of Nunda, S. D., has succeeded I. S. Kittleson as manager at the Monarch Elvtr. Co. elevator. Mr. Kittleson served as agent here for the past month but was forced to give up his position because of his health. Mr. Halvorson has been in the grain buying business at Nunda for the last 20 years. Mr. Kittleson was called here from Atwater to serve as agent during the absence of J. M. Jensen who is confined at the Montevideo hospital because of injuries sustained in a fall at the elevator.

Minneapolis, Minn.—Effective Monday, Sept. 25, until further notice, the Minneapolis grain market quotations will be broadcast over Radio Station WCCO as follows: Daily, flash quotations of active futures at 10:00 a. m.; 11:00 a. m.; 11:45 a. m. Sat., 11:30 a. m.; 1:00 p. m. (except Sat.); closing futures and cash quotations plus grain bulletin changes, 1:45 p. m. Sat., 12:15 p. m. The preceding schedule will prevail for two weeks after which WCCO announces it regrets that it will be impossible to find time later for the complete closing report.

Tracy, Minn.—One hundred and fifty grain dealers attended the Western Grainmen's meeting held at the Municipal building the evening of Sept. 12 when local grainmen acted as hosts. J. W. Evans of Montevideo, president of the Ass'n, presided. Atty. William R. Mitchell extended a civic welcome to the visitors. Mr. Haugland, representative of the Farm Credit Ass'n, was the principal speaker, talking on the subject of handling of sealed corn. Women who accompanied their husbands were entertained at a theatre party following which men and women were served lunch by local and neighboring grainmen.

MISSOURI

St. Louis, Mo.—E. F. "Soybean" Johnson, of Ralston-Purina Co. has been made president of the Domestic Fats & Oils Conference.

Meadville, Mo.—Neal Bryan purchased the G. W. Plummer feed mill which he is operating. Mr. Bryan and his family came here recently from California.

Malden, Mo.—T. F. Baker of Sikeston has purchased the Dunklin County Grain & Seed Co. and will assume his duties here Oct. 1. He will be assisted by his two sons, Ralph and Tom III. Mr. Baker is at present superintendent of the grain elevator at the Scott County Milling Co. Mill A with which company he has been employed for 32 years. His son, Tom, is employed by the Bank of Sikeston.

Glasgow, Mo.—The Glasgow Co-operative Ass'n, in digging for a foundation for its new wheat storage bins just south of the present elevator, has found it necessary to move the proposed foundation five ft. farther east than original soundings indicated because it has been discovered that formerly the edge of the river ran along the exact line the west foundation would occupy and when the foundation pit had reached the level intended on the original site, it was found to have holes in it. Previously every drill hole made by the soundings had hit rocky ledges.



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KANSAS CITY LETTER

Ralph G. Martin has been elected to membership in the Kansas City Board of Trade.

E. C. Meservey, Jr., of the Meservey-O'Sullivan Grain Co., and president of the Kansas City Board of Trade, and Frank A. Theis, president of the Simonds-Shields, Theis Grain Co., have been elected Kansas City members of the National Grain Trade Council for the ensuing year. Mr. Theis was chairman of the council for the last term.

F. C. Greutker, formerly of the St. Louis branch, has been named manager of the Kansas City division of Cereal By-Products Co., succeeding J. T. Sexton, who resigned to establish his own feed ingredient brokerage business. Mr. Sexton plans to offer a complete line of ingredients including millfeeds. He has been in the feed business for over 22 years, at one time being head of a large mixed feed plant.

The Kansas City Board of Trade recently announced as winners of its second annual Journalism scholarship awards two Kansas newspapers, the Peabody Gazette and the Pratt Tribune, each receiving a \$100 scholarship as having been adjudged as giving the best community service during the past year. The Peabody Gazette, a weekly publication, designated Kenneth Kirchhofer for the scholarship award, and Marcell Norby, 17, of Cullison, is the recipient of the scholarship awarded the Pratt Tribune.

Directors of the Kansas City Board of Trade, in special session Sept. 15, adopted a resolution reducing margin requirements on grain future transactions 2 to 3c a bushel. The resolution stated that proper and adequate initial margins on transactions in grain for future delivery shall be not less than the following: On hedging and spreading trades, 5c a bushel on wheat, corn and oats, except trades in the same grain in the Kansas City market, 1c. All other trades: 12c a bushel on wheat; corn, 9c; oats, 6c. On new commitments made after this date margins shall be maintained on both sides of the market at not less than the following: On wheat, 8c a bushel; corn, 6c; oats, 4c; millfeeds, \$2 per ton.

MONTANA

Havre, Mont.—A hay warehouse of the Farmers Grain Exchange was destroyed by fire on Sept. 2.

Cascade, Mont.—The local Greely elevator under the management of Bob Simmons has installed a new grain cleaning machine and wheat seed treater. A feed grinding and mixing machine will be installed in the near future.

Hamilton, Mont.—The Hamilton Flour Mills Co. and the local feed and grain unit of the Missoula Mercantile Co., recently merged, for the present will continue to operate as in the past with Frank Wright in charge of the flour mill and Lloyd Davis in charge of the feed and grain unit.

NEBRASKA

Kearney, Neb.—A new truck scale has been installed by the W. H. Cramer Const. Co. at the T. H. Ingalls & Sons elevator.

Genoa, Neb.—The Farmers Co-operative Grain & Milling Co. reported property damage sustained from high winds in August.

Pender, Neb.—Independent Rendering Co. installed a No. 2 Kelly Duplex Vertical Feed Mixer, one-ton capacity with motor drive.

Buda (Kearney p. o.), Neb.—The D. Wort elevator has been completely repaired and a new truck dump installed by the W. H. Cramer Const. Co.

Omaha, Neb.—The Farmers Elvtr. Ass'n of Nebraska will hold its annual state meeting here Oct. 16 and 17. Frank Rutherford is sec'y of the Ass'n.

Central City, Neb.—W. E. Peters is the new manager of the Farmers Union State Exchange. He held a similar position at Scribner before coming here.

Campbell, Neb.—Oliver Collison and Kenneth Frederickson, in the milling business here for the last seven years, have dissolved partnership. Mr. Collison purchasing the interest held by Mr. Frederickson, and the former to continue the business alone.

Omaha, Neb.—We have placed the date of our convention on Friday, Oct. 20, at the Fontenelle Hotel, Omaha. It will be a one-day meeting with a big dinner in the evening. A program is being planned for the occasion.—J. N. Campbell, sec'y, Nebraska Grain Dealers Ass'n.

Melbeta, Neb.—L. P. Lupher, Minatare, Neb., has purchased the Farmers Elvtr. here to which he has had the W. H. Cramer Const. Co. make extensive repairs. Included was the installation of a 6-ft. truck dump; 34-ft., 20-ton truck scale, building new office and warehouse; widening driveway; working over inside of elevator; reroofing roof and covering sides of elevator with galvanized iron.

Heartwell, Neb.—The east elevator of the Hart, Bartlett & Sturtevant Grain Co., formerly owned by the Shannon Grain Co., was destroyed by fire Sept. 15 and some 13,500 bus. of wheat stored in the structure were partly damaged by fire, smoke and water. Of this amount about 3,000 bus. was storage grain, the rest belonging to the company. It is being salvaged as rapidly as possible. The elevator and its contents were insured. Ralph Johansen is the company's local manager.

NEW JERSEY

Washington, N. J.—James La Rue & Son installed a Kelly Duplex No. 3 Vertical Feed Mixer, 1½-ton capacity with motor drive.

NEW MEXICO

Clovis, N. M.—G. O. Fedric, lessee and manager of the Farmers Elvtr. at Melrose, N. M., until Sept. 1, has located here and will operate a sweet feed plant and manufacture all kinds of poultry and livestock feeds.

NEW YORK

Ogdensburg, N. Y.—The Bill-Bell flour mill and its iron clad elevator are being torn down.

Sodus Point, N. Y.—The Genesee Brewing Co. has let a contract to Nicholson Co. for a 200,000-bu. addition to its malting elevator. Monarch Eng. Co. drew the plans.

Oswego, N. Y.—Canal grain handlers at the State Barge Canal elevator won a 15c pay increase following a 21-day strike and the men are back at work, complete settlement of the dispute having been effected. The increase boosts their hourly earnings to 65c.

BUFFALO LETTER

Spencer Kellogg & Sons have filed plans for a \$2,000 job at its Buffalo elevator.—G. E. T.

Production has been resumed at the Hecker-Jones-Jewell mill in Buffalo following settlement of a week-long strike.—G. E. T.

George H. Avery, 41, superintendent of the Paget Car Co-operative Co., Buffalo, with whom he had been employed for 16 years, died of a heart attack.—G. E. T.

The Standard Elvtr. & Grain Division of Standard Milling Co. has opened offices in the Chamber of Commerce Bldg., Buffalo, with J. F. Gerard as manager, and is doing a general grain merchandising and elevator business. The Standard Elevator was formerly known as Nisbet Elevator.

As Simon Martin, 65, a veteran scooper, was climbing out of the lake steamer Smith Thompson at the Canadian Pool Elvtr. in Buffalo Harbor the night of Sept. 13 at the conclusion of his tour of duty, a rigging broke and a swinging block struck him on the head, knocking him back 15 ft. into the empty hold of the boat. He died a short time later in Emergency Hospital.

NEW YORK CITY LETTER

The name of Franklin L. Lewi, Inc., was changed to Universal Grain Corp., effective Sept. 1.

The New York Central Railroad's five-story brick elevator, in New York, a landmark for 75 years, which wreckers have been taking down since May, was destroyed by fire the night of Sept. 6. While the interior portions of the 1,500,000-bu. house had been removed, the outer walls were intact at the time of the fire and with wooden sheathing beneath the brick wall, firemen experienced considerable difficulty in fighting the blaze.

"KEEP us out of war" --
silly jingle - dangerous -
we've heard it before - it got
us into war - and likely to
again. Who wants war? - no-
body. Could America have
prevented war? - Yes! - How? -
by telling the world weeks ago
- that we were ready to fight -
any time - for liberty - decency
and safety. Washington knew -
he said: "always ready for
war." Did we tell the world?
- we did not - now what? Our
best bet - President's neutral-
ity program.

LOWELL HOIT & CO.

The States Grain Corp., New York, feed, grain, hay, has been incorporated; 200 shares, n. p. v.

Franklin L. Lewi has been elected vice-pres. of the feed and grain division of H. S. Cramer & Co., Inc., well known New York exporting, importing and commission firm. Mr. Lewi, who formerly operated as Franklin L. Lewi, Inc., and has been prominently identified with eastern grain and feed industries for many years, organized the feed and grain division of the Cramer company, and will continue his activities in those industries the same as heretofore. He is a former president of the New York State Hay & Grain Dealers Ass'n.

NORTH DAKOTA

Bordulac, N. D.—The Farmers Elvtr. Co. installed a new truck lift.

McClusky, N. D.—The Wahl Grain Co. recently installed a new truck lift.

Lemert (Carrington p. o.), N. D.—The Lemert Grain Co. recently installed a new truck lift.

Fargo, N. D.—E. C. Walker installed a No. 11 Kelly Duplex Horizontal Feed Mixer with motor drive.

Wahpeton, N. D.—Work was started recently on the new 35,000-bu. capacity elevator for the Monarch Elvtr. Co.

Emerado, N. D.—The Farmers Co-operative Elvtr. Co. recently installed a 20-ton 34x9 ft. Soweigh Dump Scale.

Milnor, N. D.—An electric motor driving a leg in the Farmers Grain & Trading Co. elevator burned out on Aug. 27.

Drake, N. D.—The Woodworth elevator recently installed electric motors to replace the gasoline engine used in the past.

Wishek, N. D.—Doyle Grain Co., Inc., has been organized; capital stock, \$30,000; incorporators, J. J. Doyle, K. E. Doyle and Walter J. Doyle, all of Wishek.

Enloe (Abercrombie p. o.), N. D.—Two 15-ton Fairbanks Scales are being installed in the National Atlas Elvtr.'s local elevator. The T. E. Ibberson Co. is making the installations.

Argusville, N. D.—A new Superior Grain Cleaner and a new dust house comprise a part of the work done at this point for the National Atlas Elvtrs. by the T. E. Ibberson Co.

Lithia (Christine p. o.), N. D.—A new drive-way is being built, repairs are being made and a new 15-ton scale is being installed for the National Atlas Elvtr. at this point. The T. E. Ibberson Co. is doing the work.

Flora, N. D.—Fire believed to have been started by lightning destroyed the St. Anthony & Dakota elevator filled with grain Sept. 14. In addition to the elevator, two box cars, a coal shed, a carload of flax and approximately 30,000 bus. of wheat were destroyed.

Fargo, N. D.—New members recently enrolled by the Farmers Grain Dealers Ass'n include the following firms: Math Braun Co., Wahpeton; Farmers Elvtr. Co., Voltaire; City Elvtr. Co., Williston; Equity Elvtr. & Trading Co., Turtle Lake; Ayre Farmers Ass'n, Ayre.

Fargo, N. D.—Radio Station WDAY will broadcast Northwest market reports as follows: Current futures and GB changes, 10:00 a. m., 11:00 a. m. (daily); complete closing futures and cash quotations plus GB changes, 1:55 p. m.; Saturday close, 12:55 p. m.

Harmon, N. D.—The Farmers elevator, which has been closed since July, 1936, has been reopened with Elmer Lubke, of Mott, in charge as manager. The elevator is a branch of the Mandan Farmers Elvtr. Co., but is being run separately from the Mandan elevator.

Ryder, N. D.—Yeggs visited offices of the Farmers Elvtr. Co., the Independent Elvtr. Co., the Osborn-McMillan elevator, the Farmers Union Oil Co. and the Midwest Lumber Co. the night of Sept. 5, cracked open safes of the various firms and escaped with about \$150.

Max, N. D.—The same gang of safe crackers who visited elevators and other business houses at Makoti and Ryder the night of Sept. 5, burglarized the Farmers Elvtr. Co.'s safe here as well as those of the Equity Farmers Elvtr., Max Grain Co., Alec Bokoroy Wholesale house and the Midwest Lumber Co., taking whatever cash was found at the several places. As a result of the burglaries four men in a black 1936 model Chevrolet with Wisconsin license plates are being sought. Prospects of finding elevator safes well filled with cash at this time of the year is believed to have attracted the gang to these parts.

Cipher Codes

Universal Grain Code: Most complete, up-to-date grain code published. Effects a greater reduction in tolls than any other domestic code. 150 pages, 4½x7 inches. Price, leather, \$3.00; paper, \$1.00.

Robinson Telegraph Cipher Code: Revised with all supplements, for domestic grain business. Leather, \$2.50; cloth, \$2.00.

Dowling's Grain Code for Grain Milling and Produce Trades, 6th edition: Used extensively in Western Canada. 154 pages, 4½x6½ inches. Weight 4 ozs. Price \$3.00.

Millers Telegraphic Cipher: (1936) For the flour feed and grain trades. 157 pages, 3½x6½ inches. Cloth bound. Weight 6 ozs. Price \$2.00.

Cross Telegraphic Cipher: 10th edition revised for provision and grain trades. 148 pages, 4½x5½ inches. Cloth \$4.00.

A. B. C. Improved Fifth Edition with Sup.: Reduces cable tolls 50% thru use of five-letter words, any two of which may be sent as one. (English.) Price, \$20.00.

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GRAIN & FEED JOURNALS
Consolidated

332 So. La Salle Street CHICAGO, ILL.

Bismarck, N. D.—Northwest market reports will be broadcast over Radio Station KFJR as follows: Current futures and GB changes, 10:00 a. m., 11:00 a. m.; complete closing report plus GB changes (except Friday and Saturday), 1:55 p. m.; 3:15 p. m., Friday close; 12:30 p. m., Saturday close.

Minto, N. D.—Stockholders of the Grain Growers Elvtr. Co. will meet soon to consider building a new elevator in the city to replace the present one which is inadequate to handle the amount of grain offered for storage. Invitations were sent to non-stockholders to get their viewpoint on the feasibility of erecting a larger elevator.

Makoti, N. D.—The Woodworth elevator and annex, containing about 20,000 bus. of grain, mostly wheat, was destroyed by fire the night of Sept. 5. Arthur Johnson is manager of the plant. It is theorized that yeggs may have set fire to the elevator in a deliberate attempt to distract attention from their activities that night, as a gang of robbers descended on four towns in Southern Ward and Northern McLean Counties, leaving in their wake rifled safes in many places of business. Ryder, a short distance from Makoti, was visited and three elevators, an oil company and one lumber office robbed while residents of the community were at the scene of the Woodworth elevator fire.

OHIO

Plain City, O.—Latham & Nau recently installed a Sidney Cleaner.

Blanchester, O.—Dewey Bros. installed a new line of Kelly Duplex Feed Mixers at their plants.

Farmersville, O.—Farmersville Exchange Co. installed a Kelly Duplex model M Hammer Mill.

Maple Grove, O.—The Maple Grove Farmers Elvtr. Co. sustained a small property loss as the result of recent high winds.

Pandora, O.—Pandora Milling Co. recently purchased a cleaner, grader, treater with blower from the Sidney Grain Machry. Co.

Dawn (Ansonia p. o.), O.—The Dawn Grain & Supply Co., managed by Alvin Steffen, has purchased a 250-bu. per hour Sidney Corn Sheller.

Chillicothe, O.—The Ross County Buro Co-operative Ass'n, Inc., reported property damage at its plant resulting from high winds on Sept. 4.

Huron, O.—Construction of a grain elevator and milling facilities is being considered by the Eastern States Milling Corporation of Buffalo. —G. E. T.

Collins, O.—A 30-ton 34x10 ft. Soweigh Motor Truck Scale equipped with a direct reading recording beam has been installed by the Collins Farmers Elvtr. Co.

Troy, O.—Russell E. Royer is the present manager of the Troy Grain & Supply Co. He replaces Paul Hance, who resigned last July, under whom he worked as assistant for six years.

Greenville, O.—New steel siding has been nailed on two sides of the elevator of the Greenville Farmers Exchange, reports its manager, E. W. Loy. A new Jay Bee 40 h.p. hammer mill has been installed.

Covington, O.—Completed late last month by S. J. Rudy & Sons, was the new reinforced concrete storage unit connecting with its old elevator, and having a capacity for 125,000 bus. in 5 bins. A. Clemans Construction Co. did the building.

Orient, O.—The Grove City Farmers Exchange, which is enlarging its recently purchased elevator here, is installing a corn sheller, a grain cleaner, a motorized hoist, new legs, and individual motors for each machine, purchased from the Sidney Grain Machry. Co.

Circleville, O.—Fire started by a hot bearing on a grain conveyor damaged the upper part of the feed mill of John W. Eshelman & Sons the evening of Sept. 12. The large four-story steel-covered building contained 150,000 bus. of grain and most of the loss, estimated at many thousands of dollars, according to officials of the company was caused by water and flames damage to this grain. An explosion of grain dust during the fire damaged the roof of the building. The loss was covered by insurance. Only a temporary shut-down of the mill and elevator resulted.

Greenville, O.—A new 130x160 brick warehouse two stories high is being completed by the O'Brien Milling Co. to bring most of its wholesale feed stocks and specialties under one roof, and eliminate seven or eight of the warehouses it now rents at scattered points about town. Seven cars may be spotted for loading or unloading at one time, and four trucks can back up to the loading docks of the new structure, says its manager, Gaynor E. O'Brien.

TOLEDO LETTER

John L. Luscombe, Jr., of the Southworth Grain Co. is a proud grandfather. His son and daughter-in-law, Mr. and Mrs. Jack Luscombe, of Ft. Wayne, Ind., were presented with their first bundle from heaven Sept. 20. The mother and baby girl are progressing very well.

The Eastern States Co-operative & Milling Co. bought a 22-acre tract of land from the Wheeling & Lake Erie Railroad at Huron, Ohio, where it will build one of the largest grain elevators on the Great Lakes. The milling company will be located on the Huron River, permitting large boats to reach it. Construction work will begin in the spring.

Toledo representatives at the Grain & Feed Dealers National Ass'n convention at Minneapolis, Oct. 1, 2 and 3 will include: Geo. R. Forrester of G. R. Forrester Co., Alfred E. Schultz, sec'y of the Toledo Board of Trade, Sam Rice of Rice Grain Co., D. L. Norby of Cargill, Inc., Wm. P. White, supervisor of weights, Toledo Board of Trade, O. W. Randolph of O. W. Randolph Co., John L. Luscombe, Jr., of Southworth Grain Co.

OKLAHOMA

Marshall, Okla.—The Farmers Co-operative Elvtr. Co. has amended its articles of incorporation.

Tahlequah, Okla.—S. R. Edmiston and O. E. Dixon began operation of the Customs Mill early in September and will grind all kinds of feed as well as make flour and meal.

Ada, Okla.—R. L. Holbird is constructing a 30x60-ft. two-story mill building to replace the one that burned last April 1. Improved facilities will be installed which include a new-type roller mill and a new higher capacity feed grinder. The building is of brick and stone.

PACIFIC NORTHWEST

Hay, Wash.—Lacrosse Grain Growers will build a bulk elevator here, starting construction this fall.

Rickreall, Ore.—Frank Farmer is equipping his elevator with a Howell Automatic Gravity type Ceresan Treater.

Bellevue, Wash.—A. R. Fulton has replaced William Little as active manager of the Mid-lakes Feed & Fuel Co.

Lacrosse, Wash.—The Lacrosse Grain Growers will build a bulk elevator here. It is planned to start construction this fall.

Olympia, Wash.—Kiely Seed & Feed, Inc., recently installed a large cleaner, purchased from the Sidney Grain Machry. Co.

Merrill, Ore.—Deschutes Feed & Seed Mill's new feed mill has been completed and is in operation. J. F. Short of Bend is the owner.

North Plains, Ore.—Frank Smith and Clarence DeFrees, formerly with the Hillsboro Feed Co., at Hillsboro, Ore., have purchased the North Plains Feed Co. from A. K. Reynolds, taking over the business Sept. 18. The firm will operate under the name of Smith & DeFrees. Both purchasers are well known locally in the feed business.

Boise, Ida.—The Idaho Public Utilities Commission has increased the warehouse handling charge of grain from 75c to 85c a ton on the application of A. G. Stanger, manager of the Idaho Falls Warehouse Co., who had asked for an increase from 75c to \$1.00 a ton. The commission denied Stanger's application for increased monthly storage rates.—F. K. H.

Vancouver, Wash.—The first grain was poured into the bins of the new addition to the Archer-Daniels-Midland Co. grain elevators this month altho the construction will not be completed until some time in October. The six bins have been finished and the cupola is under construction. Conveyor machinery has been installed and the first grain tests were made Sept. 18.

Rupert, Ida.—The Buhl Seed & Grain Co. sustained a small loss at its plant as the result of recent high winds.

Winlock, Wash.—Zion Bros. of Drews Prairie have taken over the feed department of the Farmers Mercantile Co., and are operating that end of the business. They have installed a fanning mill for custom use and along with this service will handle feeds and seeds. The indoor battery poultry plant that the Farmers Mercantile Co. has operated the last two years will continue to be operated by Mr. Torkko, Mr. Palo having retired from the firm.

PENNSYLVANIA

Delta, Pa.—The flour and feed mill and grain elevator owned by M. C. Macomber was destroyed by fire Sept. 15.

Elkview, Pa.—Elwood Chambers installed a No. 2 Kelly Duplex Feed Mixer, one-ton capacity, with motor drive.

SOUTH DAKOTA

Lennox, S. D.—Gerd Null of LeMars, Ia., has moved here and will engage in the grain business.

Wallace, S. D.—A 20-ton Soweigh Motor Truck Dump Scale has been installed by the Wallace Farmers Elevator Co.

Emery, S. D.—Edwards & Son are equipping their plant with a 26-inch attrition feed mill, with two 30 h.p. direct connected motors.

Gettysburg, S. D.—Charles Lingenfelter, for twenty years operator of the Sexauer elevator at Cottonwood, has been transferred here, in charge of the local Sexauer elevator.

Lane, S. D.—The Farmers Elevator Co. is installing a 20-inch attrition feed grinder equipped with a pair of 10 h.p. motors. The new equipment is being furnished by R. R. Howell Co.

Elk Point, S. D.—The J. J. Mullaney & Son Co., Farmers Union Elevator Co. and Manning elevators have completed the erection of three government storage bins on their respective lots. Each elevator received a carload of 22 but put up three to start with. The bins are of the galvanized iron, round, 1,500-bu. capacity style.

Oldham, S. D.—The Farmers Co-operative Elevator Co., recently incorporated, has purchased the M. C. Johnson elevator, taking immediate possession. The company is affiliated with the Farmers Union Grain Terminal Ass'n of the Twin Cities. The elevator is equipped with a modern feed grinding plant and a mixing unit will be added.

Lennox, S. D.—Cargill, Inc., new elevator and mill will be ready for operation by the time the new corn is ready for delivery. The storage capacity of the building is about 35,000 bus. and three mills will be used to grind feed, two hammermills and one roller mill having been installed for this purpose. The entire structure is being covered with galvanized iron.

SOUTHEAST

Smithfield, Va.—The J. L. Warner feed store was damaged by fire early Sept. 13.

Lancaster, S. C.—The grist mill owned by the estate of R. E. Wylie, was destroyed by fire Sept. 8.

Frankford, Del.—The Hudson & McCormick Co. installed a No. 2 Kelly Duplex Vertical Feed Mixer, one-ton capacity with motor drive.

Bluefield, W. Va.—The main building of Sublette Feed & Supply Co. was destroyed by fire Sept. 11 causing heavy damage to both building and stock. Temporary quarters are being sought by the company. An auxiliary building was saved.

TENNESSEE

Greeneville, Tenn.—Mohawk Feed Mill recently purchased a "Sidney Vertical" Feed Mixer.

Westmoreland, Tenn.—The Westmoreland Milling Co. plant was destroyed by fire on Sept. 13.

TEXAS

Claude, Tex.—The Nelson Grain Co. recently added 26,000-bu. storage capacity at its local plant.

WISCONSIN

Kenosha, Wis.—The Al Lois elevator, feed store and warehouse was damaged by a recent fire.

West Salem, Wis.—Model Feed Store installed a No. 2 Kelly Duplex Vertical Feed Mixer with motor drive.

Dodgeville, Wis.—O. W. Hennessey & Sons installed a Kelly Duplex Corn Cutter and Grader with motor recently.

Plover, Wis.—Chester Worzalla, manager of the McKercher Feed Mill here, was married Aug. 26 to Miss Katherine C. Zynda.—H. C. B.

Superior, Wis.—Frank Austin, 79, retired official of the Great Northern Elevator Co., died Sept. 15 in a local hospital. Mr. Austin was associated with the firm for 50 years.—H. C. B.

McFarland, Wis.—The Peter Evenson Feed Mill was damaged by fire the night of Sept. 5. A quantity of feed and grain was saved when it was moved to a side of the building not touched by either water or fire.

Madison, Wis.—The Catlin bill introduced in the state assembly Sept. 21 proposes to eliminate the coal and grain occupational tax. Such a proposal, it is estimated, would result in a loss of about \$80,000 in the state's revenue.—H. C. B.

Oconto, Wis.—The Suring Milling & Elevator Co. plant was closed for a week recently during installation of a larger and more modern feed grinding mill. Electric driven motors replaced the steam power. Leo Elfe is proprietor of the elevator.

Webster, Wis.—The Webster Co-operative Creamery is building a 20x50-ft. building adjacent to its feed and flour warehouse to house machinery and fixtures of a feed mill. Four bins of a carload capacity each will be installed; machinery will be in the basement, with mixer and work room on the first floor.

Menomonie, Wis.—The Bake-Rite Baking Co., Stevens Point, Wis., was victorious in its fight against the city of Menomonie's ordinance regulating transient merchants, peddlers, etc. The law was declared unconstitutional by Judge Thomas, thereby laying open the way for the company to secure a permanent injunction against the city and Carl Pederson as municipal judge from enforcing the ordinance against the baking company.

Superior, Wis.—The King Midas Co. was formally welcomed to the city at a testimonial banquet here Sept. 19, which was attended by the following company officials: W. M. Steinke, vice-pres., in charge of sales; H. E. Kuehn, vice-pres., Minneapolis, and T. W. Tarling, mill supt. Also present were T. P. Heffelfinger, Minneapolis, vice-pres., of the Van Dusen Harrington Co., and Edward W. Carlson, president of flour mill workers union, local No. 18905.—H. C. B.

MILWAUKEE LETTER

Carl F. Sederholm, Mohr-Holstein Commission Co., Allan C. Severson, Fraser-Smith Co., Milwaukee, and F. Peavey Heffelfinger, F. H. Peavey & Co., Ervin E. Kelm, Cargill, Incorporated, and Allan L. Burdick, Electric Steel Elevator Division of Russell, Miller Milling Co.,

Minneapolis, have been elected members of the Milwaukee Exchange.

The Archer-Daniels-Midland Co. has purchased the Ladish Milling Co. property and is making the changes necessary to put it in operation as a grain handling plant, discarding the feed manufacturing facilities with which it was originally equipped. The Milwaukee office of the Archer-Daniels-Midland grain department is in charge of Walter R. Vye, formerly manager of the Milwaukee branch of Cargill, Incorporated.

Milwaukee, Wis.—Under the amendment to Rule 113 of the Milwaukee Grain & Stock Exchange adopted Sept. 15, relating to charges made by terminal elevators for services performed, the charge for unloading, elevating and reloading, including 10 days free storage is now 1½¢ per bu., instead of 1¢ under the old rule. The charge for direct car-to-car transfer remains as before at 1¢ per bu.

Milwaukee, Wis.—Kurtis R. Froedtert was elected chairman of the board and president of the Froedtert Grain & Malting Co. at the annual stockholders' meeting Sept. 19. Mr. Froedtert returns to active management of the malting firm bearing his name after having left the post of chairman of the board a year ago. Mord Bogie of New York was named vice-pres., and Gov. Julius P. Heil, who has served on the board for several years, was elected treasurer; Alvin R. Cord was re-elected sec'y.

WYOMING

Casper, Wyo.—The Wyoming Milling Co., new Casper industry, began the manufacture and distribution of its products the week of Sept. 1. The plant's wheat bins are full to the brim and the firm is prepared to operate at capacity.

After having been in effect since Sept. 6, 1938, the bee marketing agreement has been rejected, 65 out of the 72 who returned ballots to the Department of Agriculture, voting for termination, in the referendum that ended Aug. 10. The marketing control ceased accordingly Aug. 29.

Grain Contracts with Farmers

Form 10 D. C. is recognized as the best for contracting grain and seed from farmers, and is in extensive use by grain dealers. Do not take chances with verbal contracts. They lead to misunderstandings, differences and disputes, as well as loss of profits and customers. Contract certifies that farmer:

"has sold.....bushels of.....at..... cents per bushel, to grade No....., to be delivered at.....on or before....." It also certifies that, "if inferior grain is delivered, the market difference at which such grain is selling on day of delivery shall be deducted. Any extension of time at buyer's option."

Originals are printed on bond paper, machine perforated so they may be easily removed; duplicates are of manila. All have spaces ruled on the back for recording each load delivered on the contract. Check bound, size 5½x8½ inches, 100 sets numbered in duplicate and supplied with 4 sheets of carbon paper. Order Form 10 DC Improved. Price \$1.10, f. o. b. Chicago. Wt. 1 lb.

Triplicating book is same as 10 DC and contains 100 additional copies of the contract printed on strong tissue and 4 sheets of dual faced carbon. Order Form 10 TC. Price \$1.35, f. o. b. Chicago. Weight, 21 ozs.

Grain & Feed Journals

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Consignments and Future Orders Solicited

Grain Movement

Reports on the movement of grain from farm to country elevator and movement from interior points are always welcome.

Rensselaer, Ind., Sept. 25.—The new corn and beans are just starting to come in.—W. C. Babcock Grain Co., by L. E. G.

Fort William, Ont.—Grain shipments from the Ports of Fort William and Port Arthur so far this year passed the 125-million-bu. mark Sept. 18 with the departure of 11 vessels with more than 1,700,000 bus. Four other boats were in port loading grain cargoes.

Buffalo, N. Y., Sept. 18.—After handling only a handful of export grain out of Buffalo all year, the railroads last week transported about 1,700,000 bus. from elevators here to Atlantic Seaboard points. Last week's total grain carloading was greater than that in the entire month of September, 1938.

Buffalo, N. Y., Sept. 15.—Buffalo's first winter storage grain cargo has reached port in the holds of the Barge Maia. Canadian grain has begun to move into Buffalo in consistently large quantities and there are indications of a revival of the once prosperous flow. Canadian elevators are congested. Buffalo elevators now hold about 12,000,000 bus.—G. E. T.

Chicago, Ill.—Heavy shipments of corn from sealed cribs in the central Illinois-Bloomington area have been moved to Chicago recently. Local officials of the C.C.C. said the movements indicated no change in the C.C.C. policy and that the corn would remain in Chicago elevators. Grain men estimated that approximately 450 cars, or 675,000 bus. of the grain—presumably 1937 shelled corn—was awaiting storage in Chicago.

St. Joseph Mo.—Receipts and shipments of grain for August, compared with August, 1938, expressed in bushels, 1938 in parentheses, were as follows: Receipts, wheat, 377,600 (1,299,200); corn, 238,500 (217,500); oats, 352,000 (502,000); rye, 4,500 (3,000); barley, — (12,250); shipments, wheat, 371,200 (926,800); corn, 42,000 (108,000); oats, 28,000 (140,000); rye, — (3,000); barley, — (7,000).—St. Joseph Grain Exchange.

Chicago, Sept. 21.—Chicago today received its second car of new corn. The car was No. 3 yellow, 56 lbs., 17.50% moisture, selling at 57c or 1c over December. A car of new corn received Sept. 20, the first of the season, originated in central Illinois and graded No. 5 yellow, 20% moisture, selling at 55c. Some truck shipments carried as low as 17.8% moisture. A car of new sample grade white corn was received today and sold for 50c.

Duluth, Minn.—Receipts and shipments of grain for August as compared to Aug., 1938, expressed in bushels, 1938 in parentheses, were as follows: Receipts, wheat, 10,984,864 (14,871,932); corn, 545,595 (1,243,985); oats, 4,403,651 (6,621,437); rye, 769,002 (2,900,831); barley, 2,646,869 (3,405,186); flax, 800,648 (857,301); shipments, wheat, 5,383,063 (3,288,995); corn, 888,193 (2,036,801); oats, 1,691,426 (2,361,176); rye, 884,343 (1,005,899); barley, 560,346 (2,063,692); flax, 143,886 (128,276).

New York, N. Y.—Receipts and shipments of grain during August as compared to August, 1938, expressed in bushels, 1938 shown in parentheses, were as follows: Receipts, wheat, 510,000 (1,314,000); corn, 54,000 (825,000); rye, — (20,000); clover seed, 588 (40); millfeed, tons, — (62); shipments, wheat, 760,400 (1,549,432); corn, 167,999 (820,072); oats, 81,000 (54,800); rye, 3,400; barley, 25,000; flaxseed, — (295,000); millfeed, tons, 33.—Dept. of Information & Statistics, Produce Exchange.

New Soybeans Grading Well

Many cars of new soybeans have been received at Chicago during the past two weeks. The quality is good, and moisture not excessive.

An unusual circumstance this season is the arrival of some carloads of beans that are green, as is discovered on cutting open the bean.

Millers Will Co-operate with Government in War Emergency

Commending the action of Secretary of Agriculture Wallace in appointing the Agricultural Advisory Council, the Millers National Federation has assured Mr. Wallace of its desire to co-operate with government agencies and with farm and business groups in formulating policies to deal with the emergency situation brought about by the European war. Fred Borries, President of the Federation, appointed a special com'te to co-operate with the Agricultural Advisory Council. In addition to Mr. Borries, the personnel of the millers com'te follows:

F. J. Allen, Bay State Milling Co., Winona, Minn.; Sydney Anderson, General Mills, Inc., Minneapolis, Minn.; J. R. Brown, Stanard Tilton Milling Co., Dallas Tex.; O. D. Fisher, Fisher Flouring Mills Co., Seattle, Wash.; R. W. Goodell, Commander-Larabee Milling Co., Minneapolis, Minn.; Richard P. Johnson, J. Allen Smith & Co., Inc., Knoxville, Tenn.; Fred J. Lingham, Federal Mill, Inc., Lockport, N. Y.; Ward Magill, Kansas Milling Co., Wichita, Kan.; A. E. Mallon, Pillsbury Flour Mills Co., Minneapolis, Minn.; C. D. McKenzie, McKenzie Milling Co., Quincy, Mich.; Philip H. Postel, Ph. H. Postel Milling Co., Mascoutah, Ill.; John A. Reis, Acme-Evans Company, Indianapolis, Ind., and Jess B. Smith, Associated Millers of Kansas Wheat, Kansas City, Mo.

Argentina Suspends Guarantee of Prices

The Argentine Government has announced that its guaranteed minimum prices for wheat and linseed were terminated, effective Sept. 6, according to a report received in the Office of Foreign Agricultural Relations from the American Agricultural Attache in Buenos Aires.

The system of guaranteed minimum prices was established by a decree of Nov. 14, 1938. The prices guaranteed were 60 cents a bushel for wheat and \$1.05 a bushel for linseed at average exchange rates for August, 1939. Under that system growers were free to sell their crop in the open market, the Government agreeing, however, to purchase all of the wheat and linseed offered to it at the guaranteed prices.

A Grain Board was set up to make purchases for the Government. Funds for financing purchases and for defraying any losses sustained in connection with subsequent sales by the Board were to be met by the profits realized by the Argentine Government in its purchase and sale of foreign exchange, and if necessary by payments out of the National Bank.

Flaxseed prices for the 1938-39 crop remained above the guaranteed minimum, so the Board was not called upon to make purchases. However, practically all of the 1938-39 wheat crop sold by farmers was purchased by the Board since Buenos Aires export prices for the most part remained below the guaranteed minimum.

The 1938-39 wheat crop in Argentina was one of the largest on record, amounting to 336,000,000 bus., according to the report. Jan. 1, 1939, carry-over stocks amounted to approximately 6,000,000 bus. Deducting an estimated 99,000,000 bus. for domestic consumption left a balance of about 243,000,000 bus. for export during the current marketing year, or for carry-over into 1940.

Actual exports from Jan. 1 to Sept. 2, 1939, amounted to 114,000,000 bus. As a result, the balance still on hand in Argentina on the latter date was 129,000,000 bus., practically all of it in the hands of the Wheat Board. It is estimated that the unsold portion of the 1938-39 crop in farmers' hands does not exceed 18,000,000 bus.

The outbreak of war in Europe carried wheat prices above the guaranteed minimum. Heavy losses were sustained by the Grain Board from

this year's operations in wheat. Suspension of the minimum prices is interpreted as notice to grain producers that the guaranties will not be adopted for the 1939-40 crop. Some governmental agencies are willing to profit from experience.

Independents Join Western Grain & Feed Dealers Ass'n

A merger of the Independent Feed Dealers of Iowa with the Western Grain and Feed Dealers Ass'n was accomplished at the annual meeting of the Independents at Des Moines Sept. 21 and 22.

The feed dealers will retain their identity, and will be the feed division of the new organization. The details will be worked out and presented at a joint convention to be held in Des Moines on Feb. 27. In the meantime, the board of the Independent Feed Dealers of Iowa is authorized to operate tentatively in co-operation with the Western Grain & Feed Dealers Ass'n under the federated title until such final adoption. The secretary was also authorized to assess 1939-40 dues on a tentative basis of equality with the present dues of the Western with an adjustment at the February meeting.

Under the circumstances, it was decided to continue in office until the February meeting those directors whose terms expired with the Sept. 21-22 meeting.

The proceedings began at a joint luncheon with the Iowa Poultry Improvement Ass'n, where H. A. Bittenbender of Springfield, O., told of the World's Poultry Congress.

DR. H. L. WILCKE of Iowa State College asked questions and to those who answered them correctly prizes were awarded.

L. CARL, statistician of the U.S.D.A., gave a talk on the effect of war on feed grain prices.

JACK SAMS of Waukegan, Ill., told about following the Golden Rule in building a feed business.

FRED HOLTBY, Minneapolis, Minn., of the T. E. Ibberson Co., outlined how idle equipment could be more profitably employed and production increased with little added expense.

L. H. FAIRCHILD, Omaha, touched on the importance of feed dealers being well posted on feeding problems to advise their patrons.

O. N. LA FOLLETTE, Des Moines, feed inspector, asked for co-operation of the trade.

The visitors were entertained at a banquet the evening of Sept. 21.

Sept. 22 a short course on poultry feeding by Professor Wilcke at Ames wound up the proceedings.

Federal Corn Bins a Nuisance

The city council of Rockfalls, Ill., has declared the government grain bins to be a public nuisance. A court injunction will be sought to prevent their erection on land owned by J. L. McKinney in a residential section.

In August, 1939, six years after the government began its slaughter of 6,410,866 pigs and sows, hog prices are lower than before the slaughter began, proof of the futility of market control.

After five days of suspended trading and a rise of twenty-two cents, the market levelled off and has gradually settled back under the pressure of the fourth largest crop in history and the heaviest deliveries ever experienced in Western Canada. Receipts in the country have been unusually heavy this season and they threaten to clog the whole system of marketing and distribution. Elevator and railway facilities are being taxed to the limit to take care of a movement that has totaled over 150,000,000 bus. since the first of this month.—McCabe Bros. Grain Co.

Grain Carriers

Freight movement by truck during August amounted to 1,007,851 tons, 24.7 per cent more than in August, 1938.

The Hudson's Bay route for grain shipments need not be considered more hazardous than the St. Lawrence route, in the opinion of the Imperial Shipping Com'te.

Grain and grain products were loaded into 36,297 cars during the week ended Sept. 9, against 30,517 cars during the like week of 1938, as reported by the Ass'n of American Railroads.

Albany, N. Y.—A second all steel, welded, compartment barge in four sections will be placed in service in October by Cargill, Inc., in the grain traffic by canal from Oswego to Albany.

Records for the movement of grain were broken by the C.P.R. during the first 18 days of September, by hauling from Winnipeg an average of 1,553 cars per day. The best previous record was 1,463 cars per day in October, 1928.

The New York Central will purchase 500 50-ft. box cars; the B. & O. will buy 2,000 cars of various descriptions, and the M. P. R. R. and the Virginian each will rebuild 1,500 cars. Orders to buy, build or rebuild by various roads aggregate 25,000 cars. All will be needed when corn starts to market.

The Mid-West Shippers Advisory Board will meet Oct. 4 and 5 at the Leland Hotel, Springfield, Ill.

Low water in the Missouri River has forced the Federal Barge Line to announce suspension of operations. Between March and August 2,320,000 bus. of wheat moved from Kansas City. Three tows already have been stranded.

Buffalo, N. Y.—Anticipating a heavy fall movement of grain to the eastern seaboard, the New York Central Railroad is stepping up activity in its East Buffalo shops, frequently as many as 20 reconditioned cars being turned out in a day.—G. E. T.

The southern railroads which have been losing traffic to the barge line have asked the C. F. A. and Trunk Line Ass'n to cancel all transit on cottonseed meal when shipped by barge line. Cottonseed meal is moved from Memphis and points south by barge to St. Louis and Cincinnati and points north, to be reshipped by rail at less cost than the all-rail movement.

Omaha, Neb.—Because of the information that an agreement may be reached between the Omaha Grain Exchange and the Nebraska railroads over what is a proper charge for special doors supplied for use in grain cars to prevent loss by leakage, the Railroad Commission Sept. 16 continued until Oct. 11 the hearing set for Sept. 20. The grain exchange appearing for shippers also, claims the charge is excessive and also sought an order requiring repayment of such excess collected in the past.

Freight rates on wheat from the Pacific Coast to neutral countries in Europe are 30 cents per bushel, 2½ times what they were before the declaration of war. War risk insurance is additional.

Churchill, Man.—The government elevator here made its best loading record recently by putting 316,000 bus. of wheat into the steamship Charles L. D. in less than 10 hours. The boat is owned by Dreyfus & Co.

Grain freight rates from Fort William to lower lake ports have advanced from 3¾ to 6 and 7 cents per bushel on account of the demands for boats to carry ore from upper Michigan. A month ago 230 boats were in the ore trade, now there are 267. During August 108 boats carried grain from Fort William-Port Arthur, and elevators in Eastern Canada have been filled.

St. Paul, Minn.—Proportional freight rates on grain and grain products are invalid in Minnesota, it was decided recently by Judge Loevinger in the Ramsey County Court. The State Railroad and Warehouse Commission issued an order creating proportional freight rates Dec. 19, 1938, and a second order revising the rates March 29, 1939. Under this new system, regular rates were to be charged on shipments to the primary markets, with proportional rates on processed or otherwise altered shipments from these markets.

The effective date of the tariffs cancelling the reshipping rate on ex-barge grain at Chicago has been changed from Sept. 15 to Oct. 15. The Interstate Commerce Commission has been asked to suspend the cancellation, the petitioners being the warehousemen at Chicago, the New England Millers and Shippers Ass'n, Finnegan Elevator Co., Cooperative Allied Grain Dealers Corporation of Morris, Inland Waterways Corporation, and Hart, Bartlett & Sturdevant Grain Company. Their complaint is that grain unloaded from barges into Chicago elevators can not be applied on future contracts in the pit without paying a penalty equal to the difference in rates of 3 or 4 cents per 100 pounds.

St. Louis Remodels Exchange Building

A \$20,000 remodeling program is under way on the oldest grain exchange building in the country. The 5 ft. cornice that has graced the 64 year old St. Louis Merchants Exchange since it was built in 1875 is being removed to leave straight walls, the sandstone building walls are being reconditioned, tuck-pointed, and waterproofed, the 3 ft. brick fire wall at the top of the structure is being coated with cement to match the sandstone walls.

The 103 year old St. Louis Merchants Exchange, which lives in the six-story structure, will have a ringside seat when St. Louis' Jefferson Memorial Project gets under way. The project is due to begin razing 40 city blocks along the Mississippi river front for three blocks back from the river, to create a huge park, with many trees and shrubs, and a tall shaft commemorating Thomas Jefferson. Two sides of the St. Louis Merchants Exchange will face the project, since the block just south of the building will be razed to provide an entrance to the city's old court house, one of the several ancient buildings that will be preserved.

The progressive spirit expressed by the directorate of the St. Louis Merchants Exchange in the improvements to its building is borne out in a sharp improvement in the volume of business done by Exchange members. July was the biggest wheat month in the history of the Exchange, reports its Sec'y Walter J. Krings. The volume reached 14,794,350 bus. or 9,863 carloads of wheat, a 38% increase over July, 1938, when 7,172 carloads were received. This increase came in spite of reduced wheat acreages under the A. A. A. soil conservation program in Missouri and Illinois, natural producing areas for the St. Louis market.



The St. Louis Merchant's Exchange Building Is Being Rejuvenated

Field Seeds

Fremont, Neb.—The DeKalb Hybrid Corn Co. has leased a building for seed corn storage and offices.

Akron, Ia.—An addition to his grain office built of concrete blocks is being constructed by Hobart Ross for the storage of seeds.

Washington, D. C.—Before the Federal Seed Act goes into effect Feb. 9, 1940, hearings will be held on proposed regulations.

Buffalo, N. Y.—After 50 years in the seed business and 34 years with Whitney-Eckstein Seed Co., Geo. P. Riley has been forced by illness to retire. He resides now at Belmont, Mass.

Fort Worth, Tex.—G. E. Cranz will continue his connection with the Terminal Grain Co., besides managing the newly incorporated Harvest Seed Co. in the wholesale and retail trade.

Omaha, Neb.—Henry G. Windheim of the Nebraska Seed Co. tripped while stepping from his car and broke his hip, and had to go to the hospital, where he will be laid up for some time.

Morganfield, Ky.—C. M. Meacham, Jr., is building a corn grading, testing and cleaning plant on his farm. Until completed his headquarters are in the Alhorn Bldg., having just sold his brick building.

Blackfoot, Ida.—L. C. Collins, manager, has announced that the Idaho Grimm Alfalfa Seed Growers Ass'n of Blackfoot, will engage in the business of cleaning, handling and marketing red clover seed.

Vermillion, S. D.—Over 75 varieties of hybrid corn have been planted for study in Clay County under the sponsorship of the state college and supervision of Dr. S. P. Swenson, associate agronomist.

Thief River Falls, Minn.—The Valley Seed & Grain Co. has begun operations in a plant on the Great Northern right of way, with equipment for cleaning seed purchased. Wm. Thompson, formerly of Wadena, is manager.

Tulelake, Cal.—L. A. Drager has installed a new seed cleaning mill, and has accumulated 300,000 pounds of alsike seed to be cleaned. This year's acreage of alsike in the Tulelake basin has been doubled over 1938.

Merrill, Ore.—C. E. Sharp is manager of the newly organized Merrill Mills Co., which was formed by employees of the Des Chutes Grain & Feed Co., of Redmond, to clean and market field seeds, with \$25,000 capital stock.

El Paso, Ill.—Lester Pfister has devised a seed corn grader with 10 screens and a small electric motor driving an eccentric weight, causing the kernels to hop up and down. The sorting of the kernels is said to be 98 per cent perfect.

Buffalo, N. Y.—The New York State Seedsmen's Ass'n elected A. H. Sehlmeier of New York City president, succeeding Harry Glenn of Rochester, who was chosen as vice president. George B. Weaver of Fredonia was elected sec'y-treas.—G. E. T.

Philadelphia, Pa.—Only \$2,839.73 was realized by Receiver Willard E. Brown from the sale of the entire business of Wesley D. Simon, doing business as I. N. Simon & Son, wholesale seeds, bankrupt. The stock in trade and equipment was valued at \$17,769.60 when listed Aug. 15. The assets were listed at \$92,177.70 and the liabilities at \$176,266.92.

Lafayette, Ind.—A recommended list of 40 Southwestern Indiana farmers, who have 12,900 acres in seed wheat, has been announced by C. E. Skiver, Purdue wheat specialist in charge of the wheat improvement program in this area. Mr. Skiver said that the seed wheat shortage has become serious and becomes more critical daily because of losses from heat and weevil.—W. B. C.

San Francisco, Cal.—The California Seed Council held its annual meeting Sept. 12 in the State Agricultural Building, with a good attendance. Lester L. Morse reviewed the Federal Seed Act and said the Wisconsin law was a model to adopt; and a com'tee was named to write the secretary of agriculture at Washington to urge a uniform state law for all the Pacific states. The next meeting is to be held Dec. 12, 1939, at Los Angeles.

Paris, Mo.—H. P. Noel, during the seed season just closing, says he has bought 100,000 pounds of timothy and red top seed at \$1.50 to \$1.75 per hundred pounds for the timothy and 7 to 8 cents a pound for the red top, and 14,000 pounds of red clover seed at 3 and 4 cents, besides 120,000 pounds of wheat at 50 to 65 cents a bushel. Only in the last few years have Monroe County farmers threshed and sold either timothy, red top or clover seed.—P. J. P.

St. Paul, Minn.—A showing of new corn hybrids tested in yield trials for the first time this year was a feature of Hybrid Corn Field Day at University Farm, St. Paul, Sept. 22. The event is primarily for central Minnesota seed producers, the farm public and county agents. In addition to the showing at University Farm, a similar day will be held at the Southeast Experiment Station, Waseca, on Sept. 28, for growers and seedsmen in that locality, announces R. E. Hodgson, superintendent.

Ames, Ia.—With 18,407 acres this year devoted to the production of certified hybrid seed corn, as compared with 17,116 acres in 1938, Joe L. Robinson of the Iowa Agricultural Experiment Association predicts that there will be more than 700,000 bus. of Iowa grown certified hybrid seed available for the 1940 planting. Approximately 77 per cent of Iowa's total corn acreage was in hybrids this year, but what the acreage next year will be is difficult to estimate beyond that the available certified seed will plant approximately 5,000,000 acres.

Indianapolis, Ind.—A warehouse with 11,000 square feet of floor space has been leased by the Associated Seed Growers, Inc., New Haven, Conn. The company has more than 30 warehouses scattered over the country. Fred Maynard is manager of the Indianapolis warehouse. The business was begun 100 years ago at Milford, Conn., by Enoch Clark and his sons, Albertus and Clifford. A nephew, Everett B. Clark, began in 1856 by growing a crop of cabbage seed for sale. In 1897 the business was incorporated as the Everett B. Clark Seed Co., and in 1927 merged with two other firms under its present name.

Seed for reseeding more than 200,000 acres of drouth-damaged hay and pasture land has been furnished to nearly 29,000 farmers in the Northeastern drouth area. More than half of these farmers are in New York and most of the others are in Pennsylvania. Seed has been furnished also in drouth areas of New Jersey, Connecticut, New Hampshire, and Vermont. It has been supplied only for reseeds in cases where seedlings made last spring were destroyed. The cost of the seed has been defrayed by the generous A.A.A.

Shelling Seed Corn

The first operation in shelling seed corn properly is to remove the small kernels from the tips of the ears. The round, thick kernels from the butts may or may not be removed preparatory to shelling. The small tip kernels complicate the grading of the seed for size and are more likely to be diseased than the other kernels of the ear, and hence frequently are less productive.

The round butt kernels are as productive as the other kernels of the ear but may not drop as uniformly through standard planter plates. When they are not removed prior to shelling they usually are separated from the more uniform kernels on the central portion of the ear by grading for size.

It always is desirable to shell seed ears separately and examine the shelled grain from each ear individually before it is added to the general seed supply. Many ears may be found the kernels of which look perfectly healthy and of good quality while on the ear, but on shelling show disease, poor germs, "silk cut," or other undesirable characteristics. The seed from a large ear sometimes will plant as much as one-tenth of an acre, and the inclusion of the seed from only a few bad ears may cause considerable loss in yield.

Small lots of seed corn are best shelled carefully by hand. Each ear should be shelled separately into a sieve, any worm-eaten or blemished kernels being rejected. If the seed from an ear appears good and contains no poor kernels, it should be poured into the general supply and another ear shelled in the same way.

Hand shelling is not practicable for large lots

Imports of Forage Plant Seeds

Imports of forage plant seeds during August and the two months ending Aug. 31 compared with like periods a year earlier, as reported by the U. S. Dept. of Agriculture, have been as follows, in pounds:

| | August | | July 1 to Aug. 31 | |
|-------------------|-----------|-----------|-------------------|-----------|
| | 1939 | 1938 | 1939 | 1938 |
| Alfalfa | 140,800 | 29,200 | 180,000 | 30,100 |
| Bluegrass, Can. | 2,300 | | 2,300 | |
| Brome, Smooth | 100 | 2,700 | 59,600 | 11,200 |
| Clover, crim. | 2,388,000 | 3,050,800 | 2,492,000 | 3,116,800 |
| Clover, red | | 142,400 | | 158,900 |
| Clover, white | 67,800 | 17,400 | 123,400 | 17,400 |
| Fescue, meadow | 4,400 | | 4,400 | |
| Grass, orchard | 800 | 38,000 | 3,100 | 137,600 |
| Mixtures, grass | 600 | | 2,000 | |
| Rape, winter | 360,900 | 152,400 | 695,900 | 412,800 |
| Ryegrass, Italian | 400 | | 400 | |
| Ryegrass, per'l | 31,800 | 78,200 | 68,200 | 113,800 |
| Timothy | 100 | 100 | 100 | 100 |
| Vetch, common | | | | 536,300 |
| Vetch, hairy | 644,900 | 1,205,400 | 1,623,600 | 2,415,100 |
| Bentgrass | 1,200 | 1,100 | 23,300 | 1,600 |
| Bluegrass, ann'l | | 3,800 | | 3,800 |
| Bluegrass, rough | 2,200 | 22,200 | 2,200 | 24,400 |
| Clover, suckling | | 4,900 | | 6,300 |
| Fescue, Chew'gs | 4,600 | 26,900 | 175,900 | 232,300 |
| Fescue, Other | 100 | 22,200 | 100 | 24,900 |
| Grass, Bahia | 400 | | 900 | |
| Grass, carpet | | 12,300 | | 12,300 |
| Grass, Dallis | 6,000 | 79,900 | 55,200 | 86,600 |
| Grass, Guinea | 10,800 | | 20,600 | |
| Grass, Jaragua | 3,600 | | 3,600 | |
| Grass, molasses | 40,500 | | 40,500 | |
| Grass, rescue | 100 | 21,800 | 200 | 21,800 |
| Grass, Rhodes | 20,000 | 15,200 | 20,000 | 18,200 |
| Grass, velvet | 3,500 | | 3,500 | 2,300 |
| Kudzu | 5,000 | | 5,000 | |
| Medick, Black | | 5,600 | | 5,600 |
| Sourceclover | | | 35,000 | |
| Sweetclover | | | 80,100 | |
| Wheatgrass, cr. | | | | 1,200 |

Directory

Grass & Field Seed Dealers

CRAWFORDSVILLE, IND.

Crabbs, Reynolds, Taylor Co., clover, timothy.

ST. LOUIS, MO.

Mangelsdorf & Bro., Ed. F., wholesale field seeds.

of seed corn. For such lots a one-hole hand or power sheller may be used. Extreme care should be exercised to insure the sheller does not break or crack an undue number of kernels. When a sheller is used the ears should always be shelled separately into a pan, sieve or other receptacle, or spaced on a flat, moving belt so that the seed from each ear may be examined and rejected if necessary before it goes into the general seed supply.—Bull. 1822, U. S. D. A.

To Encourage Production of Winter Legume Seed

A program for encouraging increased production of Austrian winter pea and hairy vetch seed in order to make possible greater plantings of winter cover crops in southeastern States has been announced by the Agricultural Adjustment Administration.

The program, designed to increase production of the seed, includes:

(1) Purchase of seed to be furnished under the Agricultural Conservation Program to farmers in Oregon and other northwestern states where expansion in acreage of these crops is possible. Most of the seed planted in the southeastern states is normally raised in the northwest.

(2) Loans to be available next year on Austrian winter pea and hairy vetch seed produced in 1940.

Awards for the purchase of two million pounds of Austrian winter pea seed and 300,000 pounds of hairy vetch seed have been made.

The seed will be made available to producers of winter legume seed in lieu of payments under the 1939 Agricultural Conservation Program. This seed will be available only for planting acreage in excess of that planted for harvest in 1939.

Seed Must Comply with Different State Requirements

Analysis of the first 100 samples sent in by seed inspectors this fall shows an abnormally high percentage of misbranding in respect to noxious weeds. Undeclared cheat, buckhorn, and other noxious weeds, and field bindweed, presence of which is illegal, regardless of amount, are responsible for the trouble. Several seedsmen seem to be working themselves into a position where cancellation of permits will be inevitable, according to the Arkansas State Plant Board.

One source of frequent trouble may be illustrated as follows: A seedsman in St. Louis ships a carload of rye to a jobber in Southern Missouri, whose trade is in both Missouri and Arkansas. These seed contain cheat, but inasmuch as cheat is not listed as a noxious weed in Missouri, wholesaler does not show the presence of cheat on his analysis tag. The jobber, however, sells a part of the rye to his Arkansas trade, samples are taken by an Arkansas inspector, the cheat is found by the Arkansas analyst, and as cheat is classed in Arkansas as a noxious weed, notice of misbranding is issued and the rye is held off sale.

To avoid such difficulties, the jobber, when ordering his seed, should have told the wholesaler that a part of his business was in Arkansas, specifying that the seed must meet both Arkansas and Missouri requirements. In fact, the jobber's best protection would be to specify that the seed must come to him with Arkansas permit tags attached. Then, if the seed proves to be misbranded the Board will hold the wholesaler liable, rather than the jobber.

Another source of error: An Oklahoma seedsman sends a sample of wheat to his state analyst at Oklahoma City, requesting a report. The analyst, not being told that a part of the seed will be shipped into Arkansas, shows on his report only those seeds which are noxious under the Oklahoma law.

Before the season has advanced any further seedsmen might with profit check all possible sources of error which might result in misbranding.

Iowa Seedsmen Weigh Merger with Grain Men

At the 47th annual meeting of the Iowa Seed Dealers Ass'n, held Sept. 15 in the Memorial Union building at Ames, a merger of this ass'n with the Western Grain and Feed Dealers Ass'n was considered, and a special com'tee with Henry Kling as chairman, was appointed to study the proposal and report later.

PRES. HENRY KLING of Cedar Rapids reviewed the past year and present conditions in the Iowa field seed trade.

JOHN T. HOFER, of Nora Springs, treasurer, reported the finances in good condition.

Three firms were admitted to membership: Dubuque Seed Co., Dubuque; Lynnville Seed Co., Lynnville, and McKee Grain & Feed Co., Muscatine.

The officers were re-elected, including Harold Ruby as sec'y.

Those in attendance were guests of the Ass'n at luncheon.

DR. H. C. MURPHY of the College in the afternoon spoke on the development of the new Iowa oats.

Dr. R. H. PORTER of the College touched on some sections of the new Federal Seed Act.

DR. GEO. SPRAGUE of the College explained the hybrid corn breeding program of the state college.

The forty present then were driven to the fields to inspect the seed crops.

To Guard Against "Chiefkan" Wheat

The Associated Millers of Kansas Wheat, organized two years ago by the principal milling companies of Kansas and Kansas City to promote the greater use of Kansas flour, today announced completion of plans for making a survey, prior to the 1940 wheat harvest, of the Kansas districts in which "Chiefkan" wheat is grown to protect themselves against the danger of this inferior variety being milled into flour to be used by bakers.

The survey plan adopted by millers provides for a field-by-field pre-harvest inspection to locate the districts in which "Chiefkan" is grown in any appreciable quantity and thereafter to advise millers of the stations from which "Chiefkan" is most likely to be shipped so that, in buying wheat for milling, they can avoid these points.

It is realized that some injustice may be done to growers at these shipping points who do not seed "Chiefkan," but millers say it is absolutely necessary to protect themselves against the inferior variety, and no more satisfactory method has been developed. Unfortunately, the "Chiefkan" berry cannot be readily distinguished from the berry of good milling varieties, so that identification can only be effected while the wheat is in the field. Millers are hopeful that this scientific pre-harvest survey not only will protect them against unwittingly buying "Chiefkan," but that growers of approved varieties in infected districts will endeavor to persuade their neighbors against seeding the inferior grain.

Winners at Grain & Hay Show Will Be Crowned

Queens of the Harvest Festivals, to be held in midwest states during the Fall months, will be invited to attend a dinner at the Saddle and Sirloin Club, Chicago, on Wednesday, Dec. 6, during the week of the International Live Stock Exposition, Dec. 2 to 9.

Following the dinner, the Harvest Festival Queens will be guests of the Exposition at a horse show matinee performance. Part of the program will include a ceremony in which the championship winners in the various divisions of the International Grain and Hay Show will be crowned champion growers with the assistance of the Harvest Queens.

B. H. Heide, manager of the International Live Stock Exposition, invites managers of festivals which will name corn or other harvest queens to contact him on arrangements for this event.

Seed Wheat Advancing Rapidly

BY W. B. CARLETON

Evansville, Ind.—With an increase of 21 cents a bushel for wheat since Aug. 3, Tri-State farmers are showing a great interest in wheat planting for the 1940 harvest. C. E. Skiver, Purdue specialist in charge of the wheat improvement program, stated recently. Because of the dry weather, farmers are finding it almost impossible to break ground.

Also because of the low production of quality wheat in the area, seed wheat is at a premium with small quantities available. Seed wheat several weeks ago was quoted at 85 cents a bushel, and has increased to \$1.25.

Because of the seed wheat demand a heavy demand for the seed wheat cleaners has resulted.

One corn crib on the farm of H. H. Askew, three miles southwest of Thurman, Ia., will hold 40,000 bus. of corn. The crib, said to be the biggest in the state, cost \$6,000 to build. He will sell the 37,500 bus. now in the crib to make room for the 1939 crop grown on 650 of the 1,329 acres in his farm. He did not co-operate with the A.A.A. in 1938, but is co-operating this year. He says, "I believe I would be making more if I was out of it."

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Feedstuffs

Madison, Wis.—The governor has signed the bill regulating the itinerant trucker.

Alfalfa meal production in August was 31,000 tons, against 30,000 tons in August, 1938, as reported by the U.S.D.A.

August production of brewers dried grains was 10,200 tons, against 10,100 tons in August, 1938; and of distillers dried grains 9,800 tons, against 9,000 tons in August, 1938, as reported by the U. S. D. A.

Atlanta, Ga.—Among the several speakers who are to address the Southern Mixed Feed Mfrs. Ass'n at the Biltmore Hotel, Atlanta, Oct. 19 and 20 are Dr. Frank Mitchell, J. Frampton King and Grant Card.

Montgomery, Ala.—Out of state corporations maintaining a stock of goods or reselling in Alabama are required to qualify under the foreign corporation act and obtain a permit to do business, the court having sustained the law in a recent decision.

Michigan Feed Men to Meet at Lansing

Lansing, Mich.—The annual meeting and Feed School of the Michigan Feed Manufacturers and Dealers Ass'n will be held in the Agricultural Building of Michigan State College, East Lansing, Mich., on Oct. 12th and 13th.

Those attending this meeting will have an opportunity to witness a football game on Saturday the 14th between Michigan State College team and that of Marquette University of Milwaukee, Wis.—T. J. Hubbard, sec'y-treas.

Computing Dairy Ration

The Ohio Agricultural Experiment Station gives the following illustration of the use of feeding standards in calculating a dairy ration: Computing ration for 1200-pound cow giving 40 pounds of 4% milk:

| | Digestible crude protein | Total digestible nutrients |
|---|--------------------------|----------------------------|
| For maintenance of 1200-pound cow | .84 | 9.51 |
| (One-fifth more maintenance requirement than for 1,000-pound cow) | | |
| For production of 40 pounds of 4% milk | 2.40 | 13.16 |
| Total | 3.24 | 22.67 |
| Give amounts of feed in accordance with suggestion made. | | |

| | Nutrients Furnished by Each Feed | |
|---|----------------------------------|----------------------------|
| | Digestible crude protein | Total digestible nutrients |
| 40 lbs. silage | .440 | 7.08 |
| 13 lbs. clover hay (Red) | .988 | 6.617 |
| 13 lbs. grain (nutrients in concentrate computed below) | 1.781 | 9.685 |
| | 3.209 | 23.382 |

These figures are close enough to satisfy the standard.

Method of determining nutrients furnished by concentrate mixture:

| | Nutrients in Feeds in Grain | |
|----------------------------|-----------------------------|----------------------------|
| | Digestible crude protein | Total digestible nutrients |
| Concentrate mixture | | |
| 400 lbs. corn-and-cob meal | 24.4 | 312.4 |
| 200 lbs. ground oats | 19.4 | 140.8 |
| 100 lbs. wheat bran | 12.5 | 60.9 |
| 100 lbs. cottonseed meal | 37.0 | 78.2 |
| 100 lbs. linseed oil meal | 30.2 | 77.9 |
| 900 lbs. Totals | 123.5 | 670.2 |

| | | |
|-----------------------------------|-------|-------|
| Nutrients per pound in mixture | .137 | .745 |
| Nutrients in 13 pounds of mixture | 1.781 | 9.685 |

*This includes protein and carbohydrates + 2% times the fat.

N-W Feed Mfrs. Elect

The Northwest Feed Manufacturers and Distributors Ass'n held its annual dinner meeting at the Curtis Hotel, Minneapolis, Sept. 12 and elected Roy Peterson, Minneapolis, pres.; E. J. Cashman, New Richmond, Wis.; L. H. Patten, Glencoe, Minn., and Stan Nelson, Minneapolis, vice presidents; S. N. Osgood, Minneapolis, sec'y-treas.

The executive com'lite is composed of Geo. Smith, A. L. Stanchfield, Warren Plummer, C. E. McCartney, of Minneapolis, and O. M. Jensen, South St. Paul, Minn.

Meeting of Mineral Feed Mfrs.

The annual meeting of the Mineral Feed Manufacturers Ass'n was held Sept. 8 at the Olympia Fields Country Club, Chicago.

J. S. AHERN, Quincy, Ill., pointed out instances where minerals had been found indispensable to the well being of poultry and live stock. In Florida the salt sickness of cattle had been traced to a deficiency of the little known mineral, cobalt. In Pennsylvania experiments had shown increased production of milk when cows were fed bone meal. Feeding of manganese compounds eliminated perosis and improved egg production.

In the afternoon nearly all those at the meeting joined in the golf tournament, low gross prize going to Ralph M. Field, president of the American Feed Manufacturers Ass'n.

L. F. BROWN of St. Petersburg, Fla., was guest of honor at the banquet in the evening. He was formerly secretary; and now is honorary executive secretary, by action taken at this meeting, and will represent the Ass'n at Washington.

Officers elected for the ensuing year are J. S. Ahern, Quincy, Ill., pres.; J. L. Elliott, Oelwein, Ia., vice pres.; and Miss Leota Varner, Quincy, Ill., sec'y-treas.

Commercial Dairy Feeds

There are now many mixed feeds advertised and sold on the market. Dairymen question whether it will be economy to use these mixed feeds largely in rations for dairy cows or whether it will pay better to use suitable home mixtures. Many of the commercial mixed feeds are the results of intelligent effort and have won good reputations among intelligent feeders. There are instances where they furnish a ready-mixed balanced concentrate mixture that is better than what could be secured by depending on unmixed concentrates available in a given locality.

There are other commercial feeds which consists of low-grade, trashy by-products which have a feeding value much lower than that of better classes of mixed feed and which are sold at relatively high cost. All commercial mixed feeds should be purchased, regardless of a fancy name, on the guarantee of amounts of crude protein, fat, and fiber they contain. Before buying commercial mixed feeds one should compare the amount of nutrients he can secure for a dollar invested in these feeds and the well-known unmixed concentrates. The matter of buying commercial mixed feeds is one of determining how efficient and economical they may prove.

The annual bulletins issued by the Wisconsin Department of Agriculture reporting the analysis of all feeding stuffs sold in Wisconsin will be helpful in showing the guaranteed amounts of crude protein, fat and fiber contained in commercial dairy feeds. On an average the

digestible crude protein in commercial dairy feeds is approximately 3 per cent less than the actual protein found in the analyses reported. The total digestible nutrients in these feeds will depend on the nature of the ingredients, which may vary even with stated formulas. This, again, leads to the conclusion that all commercial feeds must sell on their merit.—University of Wisconsin.

Johnson Heads Fats and Oils Conference

President of the recently organized Domestic Fats & Oils Conference is E. F. (Soybean) Johnson, of St. Louis. T. J. Kidd, Birmingham, Ala., and Glenn T. Stebbins, Kansas City, Mo., are vice-presidents. R. E. Morse, Boston, Mass., is treas.; F. B. Wise, Washington, D. C., sec'y and assistant treas.; A. M. Loomis, Washington, D. C., Washington representative.

Purpose of the conference is "to protect and further the production of domestic fats and oils until such production reaches our domestic requirements." Affiliated organizations are the American Soybean Ass'n, American Fisheries Ass'n, Cooperative, Ass'n Southern Commissioners of Agriculture, Ass'n of American Producers Domestic Inedible Fats, Cottonseed Oil Producers, Kansas Livestock Ass'n, National Dairy Union, Soybean Processing Industry, and the United States Livestock Ass'n. These and many other agricultural organizations, both national and local, are supporting the conference and its objectives.

National Feed Week, Oct. 16-21

National Feed Week has been celebrated for the past two years and has been a great success. It started as an experiment in 1937 and gained considerable momentum last year. With the effect of the experience and publicity of the last two years, the devotion of this one week to spreading the gospel of feeds and feeding will take on an even broader character and be a more marked success this year.

National Feed Week posters are available from National Feed Week Headquarters, Grain & Stock Exchange, Milwaukee, Wis., at \$2 for 100, \$8.50 for 500, or \$15 per 1,000; all prices f.o.b. Milwaukee. They are lithographed in colors and 17" wide by 22" deep. Manufacturers are urged to order posters for distribution to their dealers as it is impossible to supply single posters direct to dealers from National Feed Week headquarters. Order posters before Oct. 1.

National Feed Week stickers are miniature posters, size 2" by 3". The price is \$2 per 1,000.



They should be used on quotations and letters. Order now for immediate delivery.

National Feed Week publicity articles are being supplied to all farm papers, poultry papers, trade papers and newspaper press services. News articles are available for dealer distribution direct to their local newspapers.

Ralph M. Field, Chicago, president of the American Feed Manufacturers Ass'n, will keynote the third annual celebration of National Feed Week with an address over Station WLS on the regular Dinner Bell program at 12 o'clock noon, Oct. 16. WLS's wave length is 870.

Mr. Field will build his talk around the National Feed Week slogan, "Better Feeding Brings Bigger Profits," and will stress the progress of feed manufacturers in producing scientifically prepared feeds and feed ingredients.

Carotene from Alfalfa Meals

The average carotene contents of the meal from the even numbered cuttings of alfalfa in Arkansas and Nebraska are higher than those from the odd cuttings. The fiber averages reach a maximum in the third cutting in Arkansas while the protein averages decline until the sixth cutting which shows a slight increase.

The average protein contents of the even cuttings in Nebraska exceed those of the odd cuttings while the average fiber contents of the even cuttings are smaller than those of the odd. In Michigan the carotene and protein averages by cutting progressively increase throughout the season while the fiber is successively lower.

The variation trend in carotene, fiber and protein by weeks is a series of waves. The waves for carotene and protein are in phase while the fiber wave is in the opposite phase, according to Wodicka and Kishlar.

Feed Prices

The following table shows the closing bid price each week for October futures of standard bran and gray shorts, spot cottonseed meal and No. 1 fine ground alfalfa meal, in dollars per ton, and No. 2 yellow corn and No. 2 yellow soybeans in cents per bushel:

| | | Minneapolis Spot | | Kansas City | |
|---------------|--|------------------|---------|-------------|--------|
| | | Bran | Midds. | Bran | Shorts |
| June 24..... | | 16.75 | 22.50 | 13.80 | 16.75 |
| July 1..... | | 16.00 | 20.00 | 13.40 | 16.50 |
| July 8..... | | 15.50 | 18.50 | 13.45 | 16.00 |
| July 15..... | | 15.00 | 18.00 | 13.00 | 15.85 |
| July 22..... | | 14.50 | 16.50 | 12.60 | 15.85 |
| July 29..... | | 14.50 | 16.00 | 13.50 | 16.00 |
| Aug. 5..... | | 14.50 | 16.00 | 13.15 | 16.35 |
| Aug. 12..... | | 14.00 | 15.50 | 13.00 | 16.30 |
| Aug. 19..... | | 14.00 | 15.00 | 13.40 | 16.00 |
| Aug. 26..... | | 15.00 | 15.50 | 13.70 | 16.50 |
| Sept. 2..... | | 17.50 | 18.00 | 16.70 | 19.55 |
| Sept. 9..... | | 23.50 | 24.50 | 18.40 | 22.75 |
| Sept. 16..... | | 22.00 | 23.00 | 19.80 | 23.00 |
| Sept. 23..... | | 20.00 | 21.00 | 18.35 | 20.85 |
| | | St. Louis | | Chicago | |
| | | Bran | Shorts | Soybeans | Meal |
| June 24..... | | 16.85 | 18.75 | 95 | 25.20 |
| July 1..... | | 16.40 | 18.70 | 91½ | 24.70 |
| July 8..... | | 16.25 | 18.30 | 93¾ | 24.70 |
| July 15..... | | 16.10 | 18.25 | 88 | 24.20 |
| July 22..... | | 15.65 | 17.75 | 91¼ | 24.20 |
| July 29..... | | 16.25 | 18.15 | .... | 21.20 |
| Aug. 5..... | | 16.10 | 18.40 | .... | 21.20 |
| Aug. 12..... | | 16.25 | 18.80 | .... | 21.50 |
| Aug. 19..... | | 16.25 | 18.15 | .... | 20.50 |
| Aug. 26..... | | 16.90 | 18.65 | .... | 22.20 |
| Sept. 2..... | | 19.80 | 21.75 | 77½ | 23.20 |
| Sept. 9..... | | 21.50 | 24.50 | .... | 35.30 |
| Sept. 16..... | | 22.00 | 25.00 | 80¾ | 36.70 |
| Sept. 23..... | | 21.65 | 23.40 | 84 | 37.00 |
| | | Cottonseed Meal | | Kansas City | |
| | | Ft. Worth | Memphis | Alfalfa | Corn |
| June 24..... | | 31.00 | 23.00 | 19.00 | 50 |
| July 1..... | | 31.00 | 22.50 | 19.00 | 49½ |
| July 8..... | | 31.00 | 22.50 | 18.50 | 48¾ |
| July 15..... | | 31.00 | 21.50 | 18.50 | 46½ |
| July 22..... | | 31.00 | 21.25 | 18.50 | 41½ |
| July 29..... | | 29.00 | 21.25 | 18.50 | 44½ |
| Aug. 5..... | | 27.00 | 21.00 | 18.50 | 45¾ |
| Aug. 12..... | | 26.00 | 20.00 | 18.50 | 46 |
| Aug. 19..... | | 26.00 | 21.00 | 18.50 | 45½ |
| Aug. 26..... | | 24.00 | .... | 18.50 | 46 |
| Sept. 2..... | | 24.00 | .... | 18.50 | 50¾ |
| Sept. 9..... | | 28.00 | 24.85 | 22.75 | 53 |
| Sept. 16..... | | 31.00 | 27.25 | 24.00 | 60½ |
| Sept. 23..... | | 31.00 | 26.50 | 23.50 | 57 |

*St. Louis bran, basis Chicago delivery; shorts St. Louis delivery.

Fire Prevention in Feed Mills

C. W. GUSTAFSON, Chief Engineer, Mill Mutual Fire Prevention Bureau, before Mutual Millers & Feed Dealers Ass'n.

Spontaneous Ignition Hazards.—Certain feeds and feed ingredients have a tendency to heat spontaneously under certain conditions. Brewers' and distillers' grains, gluten feeds and some types of fish meal seem to be the worst offenders. All of these and any others which show a tendency to heat should be watched carefully to observe heating as they are received from cars and, if in sacks, to so pile as to leave ventilating spaces between tiers and piles.

If stored in bulk, it is of extreme importance that the material be checked frequently for heating. While permanently installed thermometer systems are recommended in all instances of bulk storage, it is likely that expense would prevent such installations in any but the larger plants. In the smaller mills, checks on temperature can be made by inserting metal rods in the material, a method which gives a rough check.

More exact tests can be made by providing permanently fixed pipes of about ½ inch internal diameter in the bins and lowering a thermometer into these pipes so that temperature readings can be taken daily. Heating of feed materials is a gradual process and if temperature readings show successive increases, it is a warning that the material is in dangerous condition and should be moved. If allowed to remain in the bin, actual ignition may occur, whereupon handling becomes a difficult and dangerous matter.

Feed ingredients should be bought only on a guaranteed moisture content. For brewers' and distillers' grains, the moisture content should not exceed from 9% to 10%. It has been found that such grains when containing moisture below 9% tend to pick up moisture and progress into the heating stage; grains with over 10% moisture have been shown to heat naturally and promptly.

Charcoal is another hazardous material which absorbs oxygen from the air and heats to the point of ignition, especially when wet or damp. Consequently, this material also requires constant watching and should be stored, preferably, in a separate detached building or in a fire-proofed room free from moisture. The so-called "Vitamin" or fish oils including cod liver and sardine oil, act much like the familiar linseed oil in that they are classed as "drying" oils. When mixed with combustible materials, such as charcoal, dust, burlap sacking, or the like, heating occurs in short order. For this reason it is important that care be taken in the handling of these oils to prevent spillage and leakage of drums. Drip pans should be provided under the faucets of drums to catch any drip which might occur. There is much still to be learned regarding spontaneous igni-

tion, but we do know something about what materials are most susceptible and concerning the precautions which can be taken.

Tramp Material in Grinders.—There now remain but few feed millers who wish to run the risk of operating hammer mills, attrition mills or other types of grinders without magnetic or pneumatic separators. The numerous fires and explosions that have occurred involving unprotected grinders stand as proof that approved protection is needed. Not only are fires and explosions prevented by standard protection but screens, hammers, and grinding plates are saved from destruction.

In the selection of a magnetic or pneumatic separator, be certain that it has the approval of your insurance company; if in doubt, ask your insurance inspector. Also make sure that it is installed correctly, another point on which your insurance inspector can help you.

Friction.—Friction in bearings appears most frequently in our loss reports. Proper lubrication is the first requisite toward prevention of hot bearings. High grade oils and greases will be found the most economical in the end, but even these must be properly supplied to the bearings. Automatic lubricators, such as bottle oilers or pin cups, have been found very efficient in many plants and are widely used.

It is important that bearings be kept clean, as accumulations of dust and grease on a bearing will not only tend to retard the dissipation of heat from the bearing but also serve to provide ready fuel for a fire should a "hot box" occur. Anti-friction bearings of the ball or roller type are strongly recommended because of their high efficiency, freedom from fire hazard and cleanliness.

Shafting should be kept in close alignment as a shaft out of line will cause binding in bearings and possibly fire. The head and boot pulleys of elevator legs are required to be kept free from contact with the head and boot castings so as to avoid friction fires at those points. Unnecessary friction represents a waste of power—so attention to the matters mentioned will not only decrease fire hazards but will lower operating costs as well.

Smoking.—The largest loss paid by the Mill Mutuals last year, some \$200,000, was the result of a minor employee "sneaking a smoke" in a mill building. That he was the cause of some 150 other employees losing their means of livelihood places him in a criminal class irrespective of the actual monetary loss of the plant. Therefore, make it a point to issue strict rules prohibiting smoking and make certain that "No Smoking" signs are posted throughout the property.

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Electrical Hazards.—Because of the flammable and explosive nature of grain and feed dust, it is extremely important that more than usual attention be paid to the selection of equipment, such as motors, controllers, lighting fixtures, and the like, and its installation. First, it is necessary that wiring for both lights and motors be in full weight rigid metal conduit having threaded couplings. Open wiring, non-metallic sheathed cables and thin wall metallic tubing are not approved for use in mills and elevators. Lighting fixtures in dusty locations are required to be protected by dust-tight outer globes and guards so as to protect against breakage of the lamps and to prevent accumulations of dust directly on the lamps. Motors, regardless of type, should be of the totally enclosed fan-cooled or pipe ventilated types as the ordinary open type of motor installed in a dusty location soon collects sufficient dust so that normal radiation of heat is prevented. Breakdown with accompanying fire or explosion usually follows.

Housekeeping.—We can say without fear of contradiction that a dirty and untidy mill is more likely to burn than one that is kept clean and neat. Furthermore, a clean, well-kept plant improves the morale of your employees; it serves as a good advertisement to customers; and is an indication that waste is at a minimum.

Leaky spouts and elevator legs, bins in bad repair, dust piping wrapped with sacks, and accumulations of old bags and refuse in a plant indicate to a considerable degree the character of the management and the business as a whole. To avoid such conditions and to make your plant a good place in which to work, see that repairs to the building and its equipment are promptly made.

Enforce a regular sweeping schedule rather than letting cleaning be done only when time is available. A clean, neat plant pays dividends and fire hazards are reduced accordingly. A complete dust control system, consisting of suction connections on elevator legs, conveyors and other handling equipment, and the venting of bins, hoppers and mixers to the outside of the building, is the best suggestion we can make toward improving dust conditions in the plant.

Arson Hazards.—Increased watchfulness is required on the part of every plant owner if we are to begin to control the arson hazard. Standard watchman service is our best recommendation, but failing this, consider subscribing to a local watchman patrol service or request that the local police visit your plant several times each night. Trespassers or suspicious-looking prowlers should be reported to the authorities. Be sure to lock all doors and windows when closing the plant for the night. If a policyholder of the Mill Mutuals, be certain that Arson Reward signs are posted at prominent points about your property; these signs carry the message that a reward of \$500 will be paid by the Mill Mutuals for information leading to the arrest and conviction of any person attempting to burn the property. These signs, we have reason to believe, have been very effective in discouraging arson fires and, together with the operations of our arson investigation staff, have been responsible for the arrest of several confirmed arsonists. Should you need a supply of these signs, they will be gladly furnished by your Mill Mutual office or inspector.

Look Your Plant Over Before Closing.—It seems that fires have a habit of breaking out shortly after the plant is closed for the night or when shifts are being changed. Is it not logical then to ask that the plant foreman, or superintendent, or some other regularly designated employee be instructed to go over the entire plant from top to bottom before leaving? Many incipient fires have been discovered during such tours which might have broken out later to entirely destroy the property.

During August 5,899,416 bus. of corn was ground by 11 refiners, against 5,483,633 bus. during August, 1938, as reported by the Corn Industries Research Foundation.

Soybean Oil Meal for Sheep

By D. S. BELL, Ohio Agricultural Experiment Station

Most people think that cows and sheep require similar food nutrients, and proceed to feed them on this basis. As a matter of fact, the protein requirements of the pregnant ewe—to mention only that food nutrient with which this discussion is concerned—is from $3\frac{1}{2}$ to 4 times as great, on a comparable weight basis, as the protein requirement of the pregnant beef cow. The digestible protein required to nourish properly 1,000 pounds of pregnant ewe is greater than the amount needed by a 1,000-lb. dairy cow producing 50 lbs. of 4 per cent milk daily.

How much protein does a sheep need? Morrison in his Feeds and Feeding concludes that a ewe weighing 100 to 110 lbs. requires from .25 to .30 pound of digestible protein daily in her winter ration, depending on whether she is in advanced pregnancy or early lactation. Extensive feeding experiments at the Ohio Station, in which protein deficient rations were partially, fully, and over-abundantly supplied with protein according to the Morrison standard, indicate that the standard should not be lower than the one established, if maximum results are desired.

How much chance does the average farm ewe have of getting enough protein to satisfy her needs from the usual farm-raised feeds allowed to sheep? This group of feeds, from the standpoint of winter rations, includes, for roughage, alfalfa, clover, soybean, mixed, and timothy hay, corn silage, corn stover, and sometimes oat straw; and for grain, corn and oats, with wheat and barley used occasionally. The answer to the question is that only in those rations which supply the ewe with at least 2.5 to 3 pounds of high quality legume hay as alfalfa, clover, or soybean, will there be enough protein to satisfy the need of pregnant and nursing ewes. Rations composed of grain, and carbonaceous roughage, alone or in combination, may always be looked upon as protein-deficient rations so far as sheep are concerned. Such rations need the fortification provided thru the addition of a protein-rich concentrate. Also rations which provide less than the above minimum of legume hay require fortification with a protein-rich concentrate. However, the quantity of supplement needed is much less than in strictly carbonaceous rations.

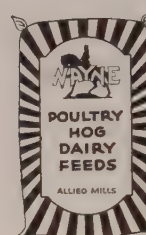
Ohio experiments involving protein-deficient

rations showed that a minimum of .4 pound of a 40-44 per cent protein supplement daily per ewe is necessary to properly fortify a ration composed of corn and oats, timothy hay, and corn silage. One lot was fed .2 pound of a supplement, while another was fed .6 pound of supplement daily per ewe. The .2 pound allowance was inadequate. There was some response noted for the increased quantity of .6 pound but scarcely enough to justify such a recom-

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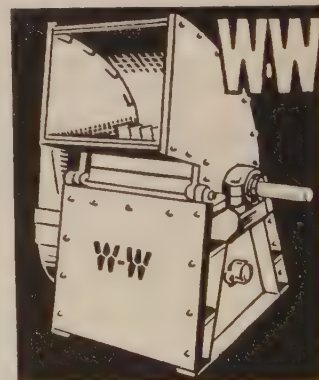
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mentation. In fact, we find farmers generally reluctant to accept the recommendation calling for .4 pound of supplement. They frequently question whether a ewe can safely take that quantity. Some express the fear that their sheep will scour badly. Others anticipate that such a quantity of .4 pound of supplement might be injurious and we have heard allusion made to so-called protein poisoning. The answer, of course, is that the sheep not only can take .4 pound of supplement as the fortification to carbonaceous rations, but they need it. High quality protein supplements fed in such quantity as will furnish the ewe with sufficient protein to satisfy her need will not of themselves prove injurious. The absence of enough protein will result in lessened thrift and vigor, weak wool fiber and slow wool growth, weak and puny lambs, with not enough milk to nourish them. The hazards of insufficient protein are far greater than any conceivable injury which might result from a slight to moderate excess of protein.

The Indiana Experiment Station was first to initiate experiments to determine the value of soybeans in sheep rations. A series of six tests followed consecutively in which soybeans, both whole and ground, and soybean oilmeal were compared with cottonseed meal as protein supplements in the ration of fattening lambs. During the winter of 1922-1923 the Ohio Station compared whole and ground soybeans with linseed meal as protein supplements in rations for fattening native fine wool lambs. In 1925 the Illinois Station published Bulletin No. 260 giving the results of feeding the soybean crop to fattening lambs. All of the investigators reached the same conclusion—namely, that soybeans, either fed as whole beans or ground, were a satisfactory supplement and compared favorably with cottonseed meal or linseed oilmeal. Also the tests were conclusive in showing soybean oilmeal is fully comparable to either cottonseed meal or linseed oilmeal as a source of protein for supplementing lamb rations. The results of these tests appear to have been sufficient to establish soybean oilmeal on a fully comparable basis with protein supplements from other vegetable sources. The sheep and lamb feeder accepted the results and has not felt the need for further experiments. This can be attested by an extensive and rapidly growing farm experience entirely favorable to the use of soybean oilmeal in sheep rations. The problem, it seems to me, is not one of the merit of the product. The problem is one of awakening sheep growers to the need for protein supplements in many of the rations used for sheep. It is my opinion that failure of the average farm ewe to get enough protein in her winter ration is the explanation for the prevalence of so many seemingly unthrifty, thin-fleshed and frequently parasitized sheep seen over the country. Poor nutrition, occasioned by such deficiencies as inadequate protein, predisposes animals, and particularly sheep, because of the frequency of the deficiency, to disease and the ravages of parasitism. It is quite in order for all of us to encourage better sheep feeding practices. Experiments and farm practice show that soybean oilmeal is one of the best supplements for fortifying protein deficient rations for sheep feeding.

The index of prices of farm products is at the highest level in nearly a year; but is still below the 1910-14 base period, and because of heavy taxation on industry the farm purchasing power index is 20 to 25 per cent below the 1910-14 level.

Accumulation of a surplus by a corporation is penalized by a tax of 25 per cent on the undistributed net income not in excess of \$100,000 and 35 per cent if in excess of \$100,000 under the Act of 1938. Examiners of the Treasury Department have been instructed to make a careful investigation where corporations have not distributed at least 70 per cent of their earnings as taxable dividends.

Soybeans in Pennsylvania

By JOHN DICKIE, Professor of Agronomy, Pennsylvania State College, before Pennsylvania Millers & Feed Dealers Ass'n.

The advent of the combine simplifies greatly the harvesting of soybeans for seed and has helped to arouse interest in their use as a cash or feed grain crop. Yields run from 12 to 30 bus. The average for the state is about 17 bus., and most of those produced have been grown on the better farm land or following heavily fertilized crops such as potatoes. Twenty bushels is a good crop and on land capable of producing 30 bus., yields of 30 or 35 bus. of wheat are commonly grown.

When harvested with a combine the leaves and stems are left on the land. Whether much soil improvement can be expected from this is questionable. Most of the nitrogen is in the seed which is removed. The average amount of straw left may run from 1 to 1½ tons per acre. It has an analysis very similar to oats or buckwheat straw and very little higher feeding value. On poor land, most in need of improvement, the amount of straw left will be comparatively small and relatively ineffective. There is very little experimental evidence on this subject.

If soybeans are grown for several years the soil becomes very loose, since the amount of root is small, and serious damage from erosion is to be expected.

Stockmen find the threshed and ground beans an excellent protein concentrate, similar to linseed meal in protein content. They have been used up to 25 per cent of the grain ration with very satisfactory results. At normal prices of protein concentrates, ground soybeans would be worth over a dollar per bushel for feeding purposes.

In the industrial market the beans have been selling in the middle west for 75 or 80 cents. If harvested for seed it would seem that soybeans would be worth much more for feeding or seed purposes than an oil mill could afford to pay for them.

The acreage of soybeans and flax has been increasing tremendously in the West. Linseed oil and meal compete with soybean oil and meal, so that lower prices may be in prospect.

One practical reason why soybeans combined are not likely to find a very large or satisfactory place in Pennsylvania agriculture is

because they do not fit well into the rotation where wheat is grown.

The farmer on poor, sour land who attempts to grow soybeans as a cash crop year after year without fertilizer and some lime is not only likely to be much disappointed in yields but is apt to find his soil at least no better and in most cases seriously damaged by erosion.

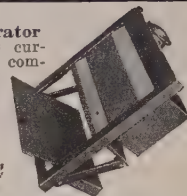
There is and will be a market in Pennsylvania for beans for seed and feeding purposes. This market might be expected to absorb all the beans grown in most localities at fair prices. If one figured cost of production, however, the crop is not apt to prove a bonanza nor should it be expected to make a poor, sour soil, rich and fertile.

Soybean Production

Washington, D. C., Sept. 11.—The U.S.D.A. reports the production of soybeans as follows, in bushels, three ciphers omitted:

| | 1939 | 1938 | 1937 | 1936 |
|---------------------|--------|--------|--------|--------|
| Illinois | 39,490 | 31,866 | 22,135 | 17,216 |
| Indiana | 12,740 | 8,404 | 5,389 | 3,948 |
| Iowa | 9,093 | 5,733 | 3,340 | 2,483 |
| Ohio | 7,332 | 5,313 | 2,538 | 2,092 |
| North Carolina | 1,444 | 2,015 | 1,552 | 1,475 |
| Missouri | 715 | 609 | 585 | 345 |

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Poultry Feeds and Feeding

Washington, D. C.—The most pronounced increase in present number of layers over last year is 8 per cent, reported in both the West North Central and South Central areas. This increase reflects the gradual recovery there from the losses incident to the feed shortages of the drouth years. In the highly commercial North Atlantic and Far Western areas, on the other hand, the number of layers are reported to be below last year and below the 10-year average.

—U. S. D. A.

Corvallis, Ore.—Turkeys and farm seeds constitute a major development in Oregon's expanding specialty crop industry. Turkeys provided a cash farm income of \$4,235,000 last year compared with \$3,753,400 in 1937 and \$2,846,000 in 1936. Specialty forage crop seed tonnage increased last year but the cash value declined. The 1938 output of 66,345,500 pounds was valued at \$3,496,400, compared with 54,360,500 pounds in 1937 valued at \$4,430,800.—F.K.H.

Feeding Poultry En Route?

Grain & Feed Journals: We would like to get a formula on a car fattener for feeding of poultry enroute to market from station. This feed needs high absorption and suspension.—The Gettysberg Equity Exchange, Gettysberg, Ohio.

Ans.: According to L. M. Hurd of the New York State College of Agriculture, the best practice is as follows:

"Just before shipment, to feed the birds abundantly on well-soaked grain, preferably wheat, with plenty of water or sour skimmed-milk to drink. If the birds are likely to be on the road six hours or longer, one three-pound tomato can should be filled with soaked whole grain and fastened inside of the shipping crate. Tests at the New York Experiment Station at Cornell University have demonstrated that this materially prevents the loss of weight after a long trip to market. One should be careful, however, not to put in too much soaked grain for this will result in the birds reaching the market with full crops. Under such conditions the receiver may hold the birds over night before weighing. One ounce of grain is permissible in the crops of broilers and two ounces for older birds arriving in the New York market.

"Grain thrown on the floor of the coop is often wasted, for the birds will not eat it after it becomes contaminated."

Range fed broilers shipped 300 miles from Ithaca to New York had a shrinkage of 2.3 per cent when fed scratch grain soaked with water in cans; 6.6 per cent with dry grain in coop and water in cans, and 8.8 per cent with no feed, no water.

Factors Affecting Perosis

A five-year experiment has just been reported from the Oklahoma Agricultural Experiment Station involving careful examinations of the leg joints, X-ray studies of the bones, and hundreds of analyses of the blood and bones of chickens, all with the hope of learning more about the factors which are responsible for the cause or prevention of perosis.

A ration was developed which was effective in producing the condition in 76 to 100 per cent of the chicks to which it was fed. The effect of various additions to this ration could then be easily observed.

Perosis was effectively prevented by giving the chickens a water extract of rice bran to drink in place of water.

Ether, alcohol, and water extracts of the basal ration, when added to the basal diet, did not aggravate the condition, suggesting rather definitely that a missing factor must be the explanation of the occurrence of perosis.

Water extracts of wheat bran, wheat gray shorts, wheat embryo and alfalfa did not prove very effective as preventives.

Chickens consuming water extracts of rice bran had larger, smoother legs of better color than did the controls and their rate of growth was increased.

When the ash from 70 lbs. of rice bran was added to 100 lbs. of the basal ration, perosis did not occur.

There seemed to be a correlation between the manganese content and the curative properties of the rations used, but high percentages of manganese were detrimental to growth.

Dry Skim Milk in Poultry Rations

In view of the uniform increase in dry skim-milk content of eight rations, the only significant growth responses to be associated with this variable occurred in the early period of growth. Rate of growth was directly related to milk level during the first two weeks. Those groups which grew slowly at first tended to grow relatively more rapidly later in the growing season, indicating the tendency of all groups to reach approximately equal mature body weights.

Total gain in body weight from day-old to 24 weeks increased with increasing amounts of milk in the ration. The magnitude of the increase was accounted for by the tenth week, all eight groups gaining nearly equal amounts in the period from 10 to 24 weeks of age. Feed consumption also increased with increasing amounts of milk, but at 10 weeks the differences were only one-third as great as the differences at 24 weeks. Feed efficiency increased with the increasing per cent of milk during the early part of the growing period, but decreased during the last part of the growing period.

Most efficient extra gains in weight in each group were made prior to the twelfth week of age. The groups fed 1.25 and 2.5 per cent milk were highest in dry skim milk efficiency, maximum values in these groups occurring from the sixth to twelfth weeks. The higher-milk groups were considerably less efficient for extra gains in weight.

It appears that the maximum beneficial effects of dry skim milk in the ration occurred prior to the tenth week of age. From the standpoint of rapid early growth and efficient feed utilization, best results were obtained with rations containing 1.25 and 2.5 per cent dry skim milk. This investigation showed no value for the continued use of dry skim milk between the tenth and twenty-fourth weeks. However, this does not prove that satisfactory results in the subsequent laying year would be obtained by feeding dry skim milk only during the early part of the growing period.

Two factors besides per cent of dry skim-milk in the ration apparently had significant effects on various results in this investigation: First, each group in the first and second years represents first and second generations, respectively on each of the eight rations. Second, the breeding flock from which the first year's chicks were obtained had been fed a grain and mash ration with 7.25 per cent dry skim milk in the mash. This ration was thus equivalent in dry skim milk content to the ration of the group fed 3.75 per cent milk. Gains up to the twenty-fourth week of age were below average in the second generation of birds fed rations containing none and 1.25 per cent dry skim milk. Gains were above average in the second generation of birds fed rations containing 6.25 and 8.75 per cent dry skim milk.

Highest shrinkage in weight of broilers shipped alive to market occurred with birds fed no dry skim milk. Evidently the use of milk in the ration did not increase the per cent of shrinkage.—Bull. 381, Penn. Agri. Exp. Station.

Manganese Sulphate Prevents Slipped Tendon

Use of manganese sulphate in the rations of battery-raised chicks as a means of preventing slipped tendon or perosis is now widely recommended and the practice has proved its value at the Wisconsin Agricultural Experiment Station.

The fact remains that the amount of phosphorus (supplied by bonemeal) in the ration is an important factor affecting slipped tendon.

Another factor to consider is that Barred Rocks seem to be more susceptible to slipped tendon than are Leghorns. At least, that has been true consistently with the strains of Rocks and Leghorns used at this station.

From trials by J. G. Halpin, C. E. Holmes and W. W. Cravens, these indications stand out:

The commonly recommended rate of $\frac{3}{4}$ pound manganese sulphate per ton of mash is not enough to prevent slipped tendon in Barred Rocks when the ration contains 4 per cent steamed bonemeal in addition to the bonemeal in 8 per cent meat scrap.

Using 1 pound of manganese sulphate per ton of mash gave better control of slipped tendon without any noticeable injury to the chicks, but there was still some trouble with slipped tendon when large amounts of bonemeal were fed.

If slipped tendon is to be held to a minimum, even when manganese is fed, the ration should not contain more than 0.75 per cent phosphorus.

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Male Barred Rock chicks are much more affected by slipped tendon than are females.

These findings are of particular importance to commercial poultrymen who grow broilers of the heavy breeds in battery brooders during the fall and winter. Under such conditions it takes a fairly liberal amount of phosphorus to prevent rickets, and on the other hand, too much phosphorus brings on trouble with slipped tendon.

Suggested Formulas for Poultry Feeds

The Texas Agri. Exp. Stat. inits July, 1939, circular suggests approved formulas for special purpose mixed feeds, among which are the following:

Growing Mash

The following formulas for growing mash are suggested, to be fed according to the directions given:

Formula No. 1

| | Per Cent |
|------------------------------------|----------|
| Yellow corn meal | 22 |
| Milo meal | 18 |
| Wheat gray shorts | 16 |
| Pulverized whole oats | 10 |
| Wheat bran | 8 |
| 43% protein cottonseed meal | 8 |
| Dehydrated alfalfa meal | 5 |
| Dried whey | 3 |
| 65% protein vacuum-dried fish meal | 3 |
| 34% protein linseed meal | 3 |
| Ground oyster shell | 2 |
| Raw bone meal | 1½ |
| Salt | ½ |

Suggested guaranteed analysis: crude protein 16.00%, crude fat 3.00%, crude fiber 7.60%, nitrogen-free extract 53.00%.

Formula No. 2

| | Per Cent |
|----------------------------------|----------|
| Yellow corn meal | 24 |
| Milo meal | 17 |
| Wheat gray shorts | 16 |
| Pulverized whole oats | 10 |
| Wheat bran | 8 |
| 41% protein soybean oil meal | 7 |
| Dehydrated alfalfa meal | 5 |
| 50% protein meat and bone scraps | 3 |
| Dried whey | 3 |
| 43% protein peanut meal | 3 |
| Ground oyster shell | 2 |
| Raw bone meal | 1½ |
| Salt | ½ |

Suggested guaranteed analysis: crude protein 16.00%, crude fat 3.50%, crude fiber 7.00%, nitrogen-free extract 53.00%.

Formula No. 3

| | Per Cent |
|----------------------------------|----------|
| Corn meal | 34 |
| Wheat gray shorts | 20 |
| Pulverized whole oats | 12 |
| Wheat bran | 10 |
| 43% protein cottonseed meal | 6 |
| 41% protein soybean oil meal | 6 |
| Dehydrated alfalfa leaf meal | 5 |
| 50% protein meat and bone scraps | 3 |
| Ground oyster shell | 2 |
| Raw bone meal | 1½ |
| Salt | ½ |

Suggested guaranteed analysis: crude protein 16.50%, crude fat 3.50%, crude fiber 7.00%, nitrogen-free extract 51.50%.

During cloudy weather fortified fish oil may be added to the above formulas.

Growing mash is to be fed with a poultry scratch feed. The proportion of scratch feed to growing mash will vary with the rate of growth desired.

Poultry Scratch Feed

The following formula for poultry scratch feed is suggested, to be fed in addition to both laying mash and growing mash:

Formula

| | Per Cent |
|---------------------|----------|
| Cracked yellow corn | 25 |
| Milo | 25 |
| Kafir | 20 |
| Wheat | 20 |
| Barley | 10 |

Suggested guaranteed analysis: crude protein 10.00%, crude fat 2.50%, crude fiber 3.50%, nitrogen-free extract 69.00%.

Poultry Fattening Ration

The following formula for poultry fattening ration is suggested, to be fed according to the directions given:

Formula

| | Per Cent |
|---------------------------|----------|
| Finely ground yellow corn | 34 |
| Wheat gray shorts | 20 |
| Finely ground milo | 20 |

| | |
|--------------------------|----|
| Dried buttermilk | 15 |
| Finely ground oat groats | 10 |
| Salt | 1 |

Suggested guaranteed analysis: crude protein 14.50%, crude fat 3.50%, crude fiber 3.50%, nitrogen-free extract 60.00%.

Poultry fattening ration is to be mixed with water to the consistency of pancake batter and fed for a period not to exceed two weeks.

32% Protein Concentrate for Laying Hens

The following formula for 32% protein concentrate for laying hens is suggested:

Formula

| | Per Cent |
|------------------------------------|----------|
| Wheat gray shorts | 25 |
| Wheat bran | 20 |
| 65% protein vacuum-dried fish meal | 17 |
| 50% protein meat and bone scraps | 17 |
| Alfalfa leaf meal | 10 |
| 41% protein soybean oil meal | 5 |
| Dried skimmed milk | 3 |
| 34% protein linseed meal | 2 |
| Salt | 1 |

Suggested guaranteed analysis: crude protein 32.00%, crude fat 4.30%, crude fiber 7.00%, nitrogen-free extract 30.50%.

In the above formula dried buttermilk may be substituted for dried skimmed milk.

This concentrate is suggested for use by feeders who have choice grains at low cost. One pound of the concentrate may be fed with from three to five pounds of grain.

Some Essential Constituents of Poultry Feeds and How They Are Affected by Storage

By R. V. Boucher, Pennsylvania State College, before Pennsylvania Millers and Feed Dealers Ass'n.

When birds have access to good range, deficiencies in the ration may be compensated for, but with the introduction of batteries for the growing stock and indoor management for hens, it soon became evident that slight errors in feeding might be disastrous.

The change in diet from the so-called "natural" food consisting largely of bugs, worms, grass and grains found in the barn lot, was not the only important difference between the old and new systems of poultry management. Birds have been bred for increased egg production, many entire flocks averaging more than 200 eggs per hen per year. It logically follows that a greater proportion of the production is out of the natural season, that is, during the fall and winter months. During the short days, lights are commonly used to lengthen the day to 12 or 15 hours. Coupled with this out of season egg production there is out of season incubation and brooding. Broilers are now produced in great numbers every month in the year, and early fall production from pullets requires earlier hatching in the spring.

Thus, artificial methods are encountered on every hand in modern poultry practices. Each of these introduce factors that complicate the feeding problem which becomes constantly more complex.

As an accompaniment of these radical changes

in management practices we find equally drastic changes in some of the common constituents of poultry rations. Economic pressure has resulted in the widespread use of by-products in feeds. Wheat bran and middlings are examples of by-products which are held in high esteem as constituents of poultry feeds. However, modern methods of manufacture are changing the nature of some feeds and these wheat by-products may be no exception.

With the increasing demand for wheat germ, the degerminated grain will yield bran and middlings which are sure to carry decreased vitamin potency. This is an example of a possible change in two major constituents of poultry feed which would be difficult to detect by the feed manufacturer no matter how carefully he selected his materials, since it would not be revealed by a chemical analysis of the product.

Only the poultryman whose young stock failed to grow or whose hens went out of production would realize that something was wrong. You are likely to be confronted with this type of problem more and more often in the future.

With this brief introduction let us approach a study of some essential constituents of poultry feeds and how they are affected by storage by considering the ration and its constituents. Any feed, whether used for animal or human consumption, is composed of six general classes of materials. 1. Proteins, 2. Carbohydrates (sugars, starches and fiber), 3. Fats, 4. Minerals, 5. Vitamins, 6. Water.

Because you as feed manufacturers are particularly interested in the nutritive essentials that are most likely to deteriorate during storage, only fats and vitamins will be discussed in detail.

Fats are used by the body to supply energy but are included in poultry rations only in small quantities since they are apparently digested with difficulty. Another very good reason that poultry rations contain fats in relatively small percentage is that fats are expensive.

Not much is known in regard to the fat requirement of poultry. At the present time, however, investigations are being carried out at the New Jersey and Louisiana Agricultural Experiment Stations on this problem and the indications are that the requirements are rather low. It is the practice at present to guarantee from three to four per cent fat in mash feeds and, until more is known about the actual requirements, this is probably the safest course to follow. Scratch grains normally contain from two to two and one-half per cent fat.

There is a distinct trend toward reducing the fat content of many constituents of feeds; for example, meat scraps. This is due to the high price that fats and oils command for purposes other than animal feeding. This trend is likely to continue and from the standpoint of poultry nutrition may be a good thing, unless it is finally proven that encephalomalacia and possibly other deficiency diseases are the result of thus decreasing the fat content of the ration. This point is brought out because, as already

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mentioned, the fat requirement is not only apparently low, but fats become rancid rather easily. The development of rancidity is the result of hydrolysis and oxidation, with the resultant formation of free fatty acids and other end products. These changes are accelerated in the presence of light, heat, and moisture. Thus, feeds exposed to light, high temperatures and moisture during storage will develop rancidity more rapidly than feeds stored under relatively dark, cool and dry conditions. Rancid fats have disagreeable odors and flavors which, of course, make the feed unpalatable. Of great importance to you as manufacturers of feeds is the fact that the presence of rancid fats in feeds increases the loss of some of the vitamins during storage.

Vitamins.—Among the newer phases of the science of nutrition is the study of the vitamins. Perhaps the most interesting single fact about this group of substances is that, although they are absolutely essential in normal nutrition, they are nevertheless required in but minute amounts, in comparison with other nutrients.

The percentage composition of ordinary feeds in respect to protein, carbohydrates and minerals can be determined by chemical analysis; but information regarding the vitamin content, usually referred to as the vitamin potency, has for the most part been obtainable only by carefully conducted feeding trials, known as biological assays. As a result of a vast amount of this type of work, it is now possible to express some vitamin potencies in terms of vitamin units per given weight of feed.

Not only may a feed constituent contain one vitamin and lack others, but the vitamin may be concentrated almost entirely in one portion of the feed; for example, the bran of many cereals is rich in vitamin B₁ while the remainder of the grain is practically devoid of the vitamin. In this same connection might be mentioned differences that occur between varieties of the same grain; for example, yellow corn is a good source of vitamin A while white corn contains practically none.

[To be continued]

Frank A. Theis, of Kansas City, has been appointed a member of Sec'y Wallace's agricultural advisory council.

Hearing of the complaint by the C. E. A. against Cargill, Inc., was begun Sept. 18 before Referee J. W. Bain. Much of the evidence introduced by the government was declared by the Cargill attorney to be irrelevant. The second day copies of entries from Cargill's books were read by W. R. Buster of the C.E.A. division of violations and complaints.

Dealer Proves Feeds for Patrons

Leslie Biddinger, secretary and manager of the Chesterfield Grain Co. at Chesterfield, Ind., has gone into the feeding of hogs and by running tests with various feeds has obtained some remarkable results.

In his territory there is not so much grain sold. Most of it is ground, and Mr. Biddinger does a large and prosperous grinding business, turning out a good deal of feed.

For his own satisfaction, Mr. Biddinger bought four hogs out of one litter, and after sorting them as nearly as possible to the same size, put two of them on corn and tankage and two on a hog supplement.

In 23 days the two on corn and tankage gained 50 pounds at a cost of 5c a pound. The two on the supplement gained 70 pounds in the same period at a cost of 3¼c per pound. Naturally Mr. Biddinger is very enthusiastic about the supplement.

He had reports similar to this from his own customers, that he hardly believed, therefore the test.

The supplementary feed he used was the Goodrich 40 per cent hog supplement, fed with ground corn and ground wheat in the proportion of two parts of corn to one part wheat.

Soybean Oil Meal Superior to Soybeans

Investigations at a number of Agricultural Experimental Stations and Colleges have shown that properly processed soybean oil meals have a greater nutritive value than raw soybeans; equally or more important was the discovery of the importance of heat in processing. Careful tests revealed that the amount of heat and length of time it was applied greatly influenced the feeding value of the meal regardless of the particular type of process used for extracting the oil.

A great many investigations have been conducted at various Agricultural Colleges and Experiment stations on soybean oil meals. The summaries of these show that properly processed soybean oil meal supplied excellent quality proteins for poultry. Most of the investigators are agreed that soybean oil meal may be used to replace a liberal percentage of the animal protein in the rations of poultry, provided sufficient essential minerals and vitamins are included.

From the research laboratories and feed lots of the Agricultural Experiment Stations and Colleges have come, from time to time, reports of tests comparing the feeding value of new process soybean oil meal with that of expeller and hydraulic type meals. Experiments conducted prior to development of the new toasting process were made with the old type white, unpalatable, dusty, extracted meal, and these early experiments mean nothing to the feeder and biller today. Very little of the old type of extracted meal is being marketed. New process extracted and toasted meal is holding its own with all other types in the feed lot.

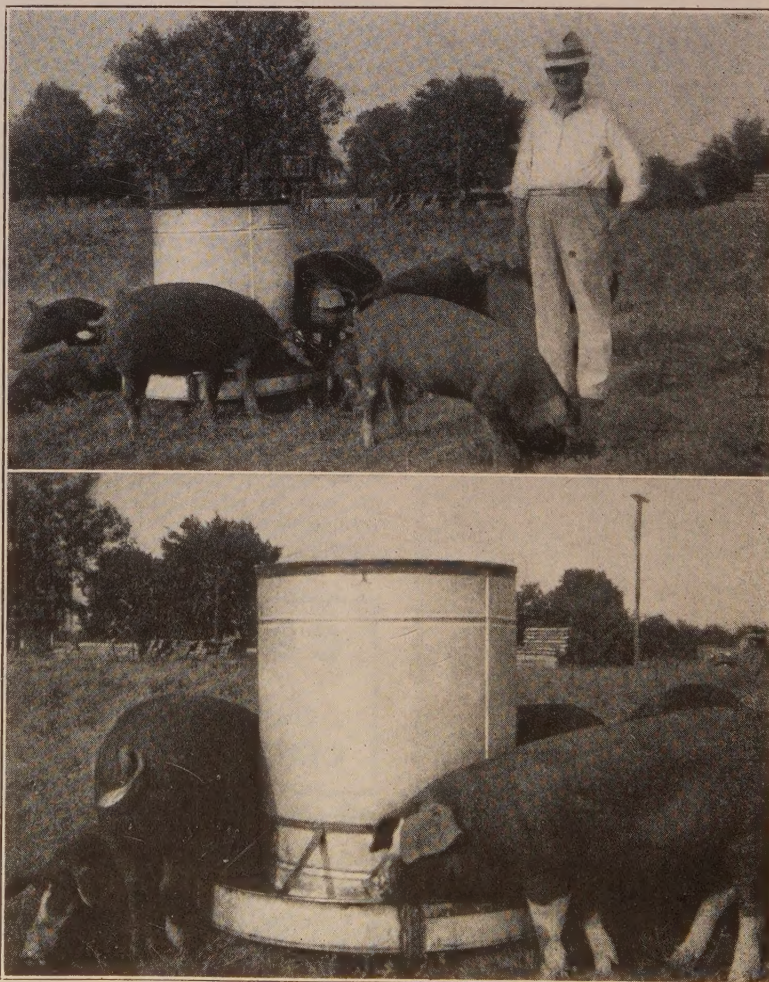
Imports and Exports of Feeds

Imports and exports of feedstuffs during July and for seven months ending July, as reported by the Bureau of Foreign and Domestic Commerce, were as follows, in tons of 2,240 lbs., except where noted otherwise:

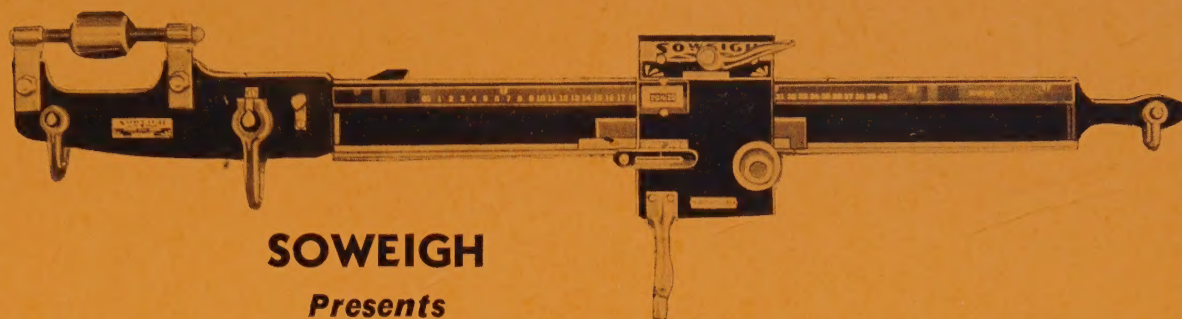
| | IMPORTS | | Seven months ending July | |
|------------------|-----------|-----------|--------------------------|------------|
| | July | | 1939 | 1938 |
| | 1939 | 1938 | 1939 | 1938 |
| Hay* | 835 | ..... | 23,480 | 7,965 |
| Coconut cake† | 8,571,692 | 5,443,893 | 65,457,393 | 43,079,733 |
| Soybean cake† | 1,712,077 | 755,500 | 18,334,725 | 19,042,409 |
| Cottonseed cake† | 67,140 | 1,797,500 | 6,662,991 | 4,340,766 |
| Linseed cake† | 547,000 | 1,101,000 | 8,582,091 | 6,711,100 |
| All other cake† | 3,245,433 | 456,000 | 16,144,183 | 7,938,745 |
| Wheat fds.* | 46,364 | 2,769 | 238,466 | 9,335 |
| Beet pulp* | ..... | 148 | 7,475 | 22,215 |
| Tankage | 6,698 | 2,466 | 39,770 | 16,114 |
| Fish scrap | 738 | 410 | 1,196,428 | 19,180 |

| | EXPORTS | | | |
|-----------------------------|---------|---------|---------|---------|
| | 1939 | 1938 | 1939 | 1938 |
| Hay | 130 | 128 | 1,777 | 59,954 |
| Cottonseed cake ... | 2,017 | 1 | 24,113 | |
| Linseed cake | 17,675 | 11,838 | 143,899 | 102,955 |
| Other oil cake | 4,845 | 2,472 | 12,767 | |
| Cottonseed meal | 41 | 1,931 | 1,555 | 11,182 |
| Linseed meal | 2,231 | 312 | 7,256 | 5,787 |
| Soybean oil cake meal | 1,613 | ..... | 20,541 | ..... |
| Other oil-meal cake | 463 | 6,442 | 3,129 | 32,105 |
| Fish meal | 67 | 33 | 226 | 479 |
| Mxd. dairy & poultry fds. | 1,611 | 1,177 | 6,922 | 5,649 |
| Oyster shells | 4,641 | 2,143 | 29,357 | 15,166 |
| Other prepared & mixed fds. | 447 | 4,828 | 2,046 | 8,176 |
| Other fd. bran | 2,017 | 2,270 | 12,942 | 15,297 |
| Kafir, milo (bus.) | 102 | 229,233 | 1,245 | 527,988 |

*2,000-lb. tons. †Pounds.



Above: Leslie Biddinger, manager, Chesterfield Grain Co., Chesterfield, Ind., with some of pigs he has on Feed Test. Below: A Close Up of Pigs and Water Fountain



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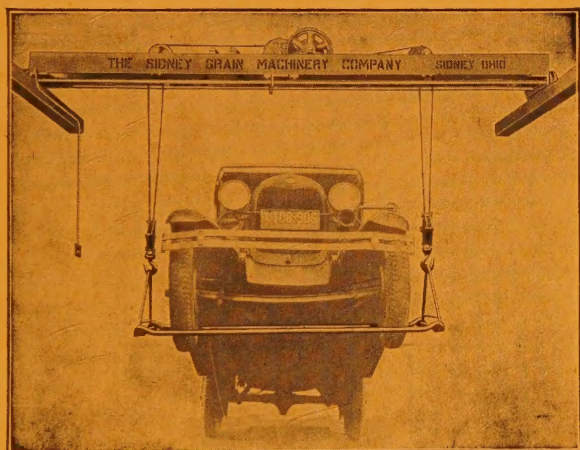
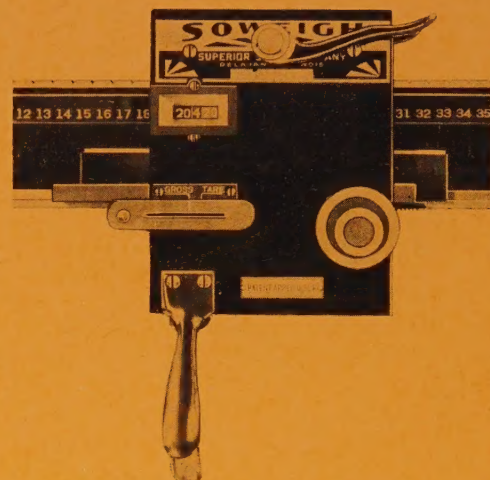
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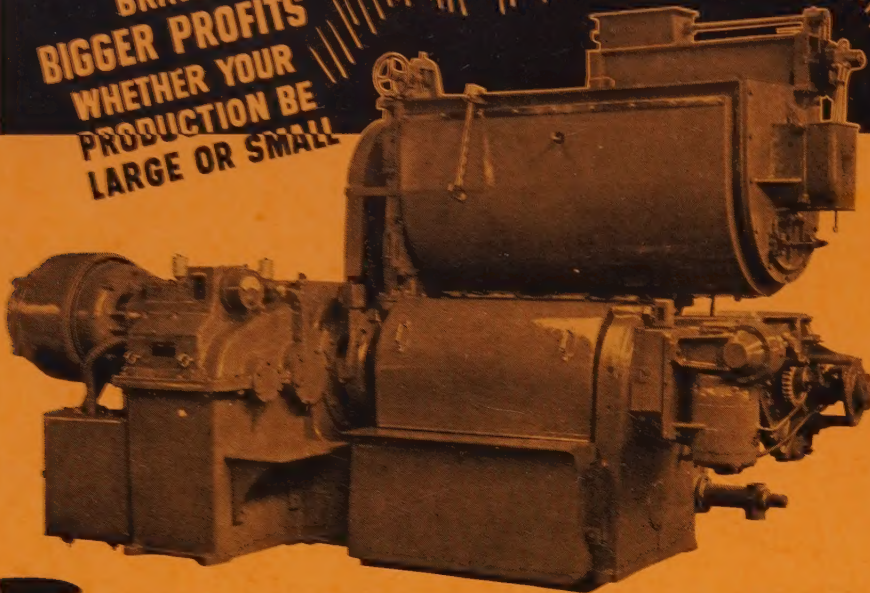
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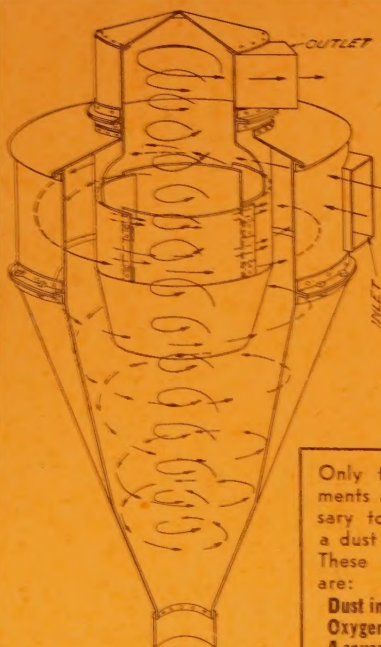
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